TYPEWRITING
AND
COMPUTER OPERATION

[OFFICE SECRETARYSHIP - OSS]

VOCATIONAL EDUCATION
HIGHER SECONDARY - FIRST YEAR

TAMILNADU TEXT BOOK CORPORATION
LEARN THOROUGHLY

TAMILNADU
TEXT BOOK CORPORATION

TYPEWRITING
AND
COMPUTER OPERATION

[OFFICE SECRETARYSHIP - OSS]

VOCATIONAL EDUCATION
HIGHER SECONDARY - FIRST YEAR

A publication under
Government of Tamilnadu
Distribution of Free Textbook Programme
(NOT FOR SALE)

Untouchability is a sin
Untouchability is a crime
Untouchability is inhuman

TAMILNADU
TEXTBOOK CORPORATION
College Road, Chennai 600 006.

© Government of Tamilnadu
First Edition – 2010

CHAIRPERSON
A.Sonny Lionel
Sr.Vocational Teacher
Voorhees Hr.Sec.School,
Vellore-632001

REVIEWER
V.Parimala Devi
Vocational Teacher,
Government Boys Hr.Sec.School,
Alangayam –635 701
Vellore District

AUTHORS

J.Shyamala
Computer Instructor,
St.Ursula's A.I.H.S.School
Church Park,
Chennai -600 006

D. Kumar
Vocational Teacher,
Government Hr.Sec.School,
Kaveripakkam-632 508
Vellore District.

Freeda Joseph
Vocational Teacher,
St.Ursula's A.I.H.S.School,
Church Park,
Chennai -600 006

P.R. Balaji
Vocational Teacher,
Islamiah Hr.Sec. School,
Pernambut – 635 810.
Vellore District.

This book has been prepared by The Directorate of School Education on behalf of the Government of Tamilnadu

This book has been printed on 60 GSM Paper

Printed by web offset at:

CONTENTS

Unit	Title	Page
	PART- A	
1	Typewriting and Computer Operation - An Introduction	(vi)
2	Typewriter - Key Board	1
3	Fingering Chart & Budget Book (Lessons I to VII)	2
4	Typing Practice:	
	(a) From Sentences - Lesson VIII	9
	(b) From Paragraphs - Lesson IX	10
	(c) From Script - Lesson X	11
5	Speed Practice - First Paper	19
	PART - B	
	Short Notes on the Topics	37
	Abbreviations & Symbols	41
1	**Statements:**	42
2.	**(i) Invoices**	51
	(ii) Credit Notes	58
	(iii) Debit Notes	64
	(iv) Account sales	70
3.	**Letters:**	
	(a) Application	76
	(b) Business letter	84
	(c) Professional letter	92
	(d) Official Letter (One authority to another)	100
4.	**Government Order**	107

Unit	Title	Page

PART - C

1. MECHANISM :

1.	Typewriter and its parts	115
2.	History of the Typewriter - Kinds of Typewriter- Advantages of Typewriter - Identification of Typewriter.	116
3.	**Key Board:** Character keys **-** Non-Character keys and their uses: Shift keys, Shift Lock, Marginal Releaser, Back Spacer, Tabulator, Ribbon Position Indicator, Key Releaser, Space Bar and Shift systems.	117
4.	**Carriage:** Size of Carriage Cylinder **-** Thumb knobs -Ratchet Wheel - Detent Roller - Detent Release Lever - Variable line spacer - Line space pawl - Line space Gauge - Line Space Knob - Reed Rollers - Marginal stops - Typewriter Scales - Paper Table - Rubber feet - Method of typing - Eraser.	120
5.	**Machine:** Mainspring Drum - Draw cord Type Guide- Type faces/Type heads Ribbon Ribbon movement.	124
6.	**Cleaning & Oiling:** Cleaning Materials **-** care taking of Typewriter - Upkeep and Maintenance - Packing care.	127
7.	**Envelope Addressing:** Block Method **-** Indent Method - Advantages - Pin Code Number.	129
8.	**Respectable Terms....**	131
9.	**Question & Answers**	132

Unit	Title	Page
II.	**COMPUTER OPERATION :**	
	Knowing About Computer	135
	The following 2 Chapters: (a) Introduction to Windows XP and (b) Windows Explorer can be learnt from The Text Book - "Computer Science, Higher Secondary First Year,Volume- II Practice" Published by Tamilnadu Text Book Corporation, Chennai-600 006.	
	CHAPTER: I Introduction to Window XP What is Windows XP Evolution of the Windows Operating System The mouse Logging in Log Off is at the Bottom Of the Start menu Working with the Windows XP The Desktop The Start menu Starting an Application Windows Windows Dialog Boxes Help and support centre Customizing Windows XP The Control Panel Applications Using Applications in Windows Working With multiple Applications	151
	CHAPTER: II Windows Explorer Files Date organization- Windows Explorer Working with Folders Changing the View Creating a New Folder Selecting Files and Folders Moving and Copying files and Folders Renaming Files and Folders Deleting Files and Folders Creating Short Cuts Search The run Command What is new in Windows XP Guarding against Viruses.	154
	IMPORTANT POINTS TO BE REMEMBERED:	163
III	**INTERNAL EXAMINATION MARKS : 50**	170
	PRACTICAL I (TYPEWRITING) INTERNAL ASSESSMENT - 25 MARKS	
	PRACTICAL II (COMPUTER OPERATION) INTERNAL ASSESSMENT - 25MARKS	
IV.	**Model Question Paper:**	171

PART - A

TYPEWRITING AND COMPUTER OPERATION AN INTRODUCTION

Our Tamilnadu Government has designed a New Educational System in Vocational Scheme, for Vocational students in the Higher Secondary level especially for 'Typewriting' learning pupils under Office Secretaryship (OSS) Group. This book has been brought in a simple way and easy to understand by the students.

Typewriter is a device for writing with neater letters; for doing quicker and better work; for taking more copies and for reading the typed matters easily. It is a gift for us, and one of the Developments in 'Science and Technology' world. In ancient times, people used 'Palm leaves' and then papers for their writing purposes. But, in handwriting, the letters are not legible and understandable to read by others, which seem to be as scribbled. By using the machine (Typewriter), we can get the work neatly and accurately; with less strain, time saving and economy in stationery

For the welfare of our students, Pictures have been given for explanation and they can easily understand to operate the Keyboard and learn its mechanism ; 'Fingering' practice can also be developed. This book contains 'hand-written scripts' for practicing and to understand other various handwritings.

When we learn Typewriting/Computer Operation, more attention must be given to sitting posture to avoid body pain, and strain to the spinal cord. The Table for keeping Typewriter/ Computer should have the height of 2 ½ ' and a comfortable stool/chair,(18"-6").

This book '**Typewriting and Computer Operation**' brings enthusiasm and stimulate the students to enter into 'Vocational Education' especially to type-wring and computer operation. Lucid style

and simple diction combined with pictures and apt illustrations make this book interesting and attractive, It is aimed to improve and inspire the exiting knowledge of Typewriting and Computer.

Students are the Pillars of our future Nation. This 'Vocational Education' creates self-confidence to the children. By learning this course, the future students can avoid to see the 'No vacancy' board; but they can create their own employment under 'Self Employment Scheme' and boldly face the unemployment problems.

'Vocational Education' stands first in the developed countries of this World. We should also give more important to 'Vocational Education' to become a self-sufficient Country and be a 'Super Nation Power'.

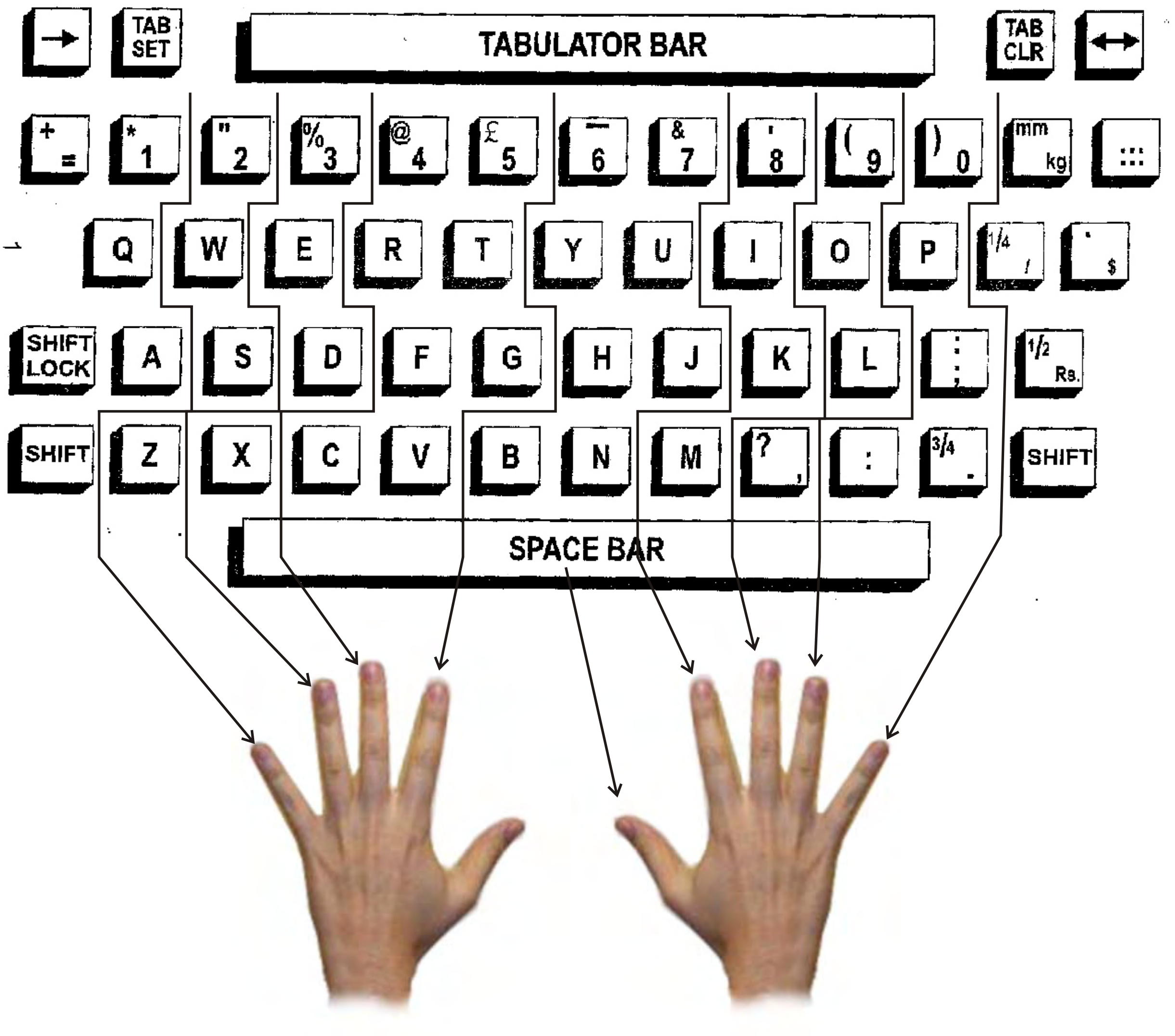
At the end of this book, a model question paper and some 'important points to be remembered' are given for **Typewriting and Computer Operation**. Students can utilize these, and prepare for the examination.

Names and places, in this book, are all fictions. Some models, scripts and pictures have been taken from DOTE-question papers and other public publications for the welfare of our students' practice and we thank the respective departments.

Finally, I thank my collogues who co-operated with me to bring out this much successfully. On behalf of the Vocational students, Teachers and my team I thank Our Tamilnadu Government especially the Educational Department for publishing a special Text Book through 'Tamilnadu Textbook Corporation' for Vocational Education under newly framed syllabus for '**Typewriting and Computer Operation**' .

- Author

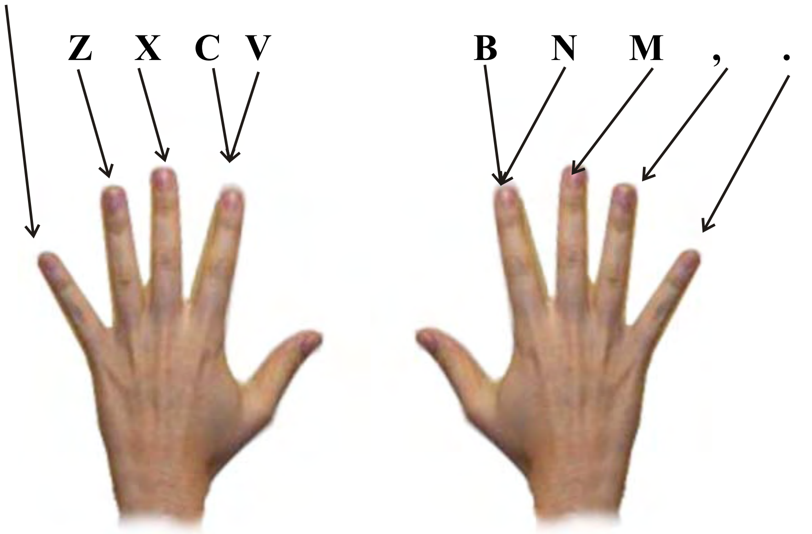
2. KEY BOARD


TAB SET
TABULATOR BAR
TAB CLR
+ =
* 1
" 2
% 3
@ 4
£ 5
6
& 7
' 8
(9
) 0
mm kg
Q W E R T Y U I O P
1/4
$
SHIFT LOCK
A S D F G H J K L
1/2 Rs.
SHIFT
Z X C V B N M
? ,
:
3/4 .
SHIFT
SPACE BAR

3. FINGERING CHART

.

1st Row	1	2	3	4	5	6	7	8	9	0
2nd Row	Q	W	E	R	T	Y	U	I	O	P
3rd Row	A	S	D	F	G	H	J	K	L	;
4th Row		Z	X	C	V	B	N	M	,	.

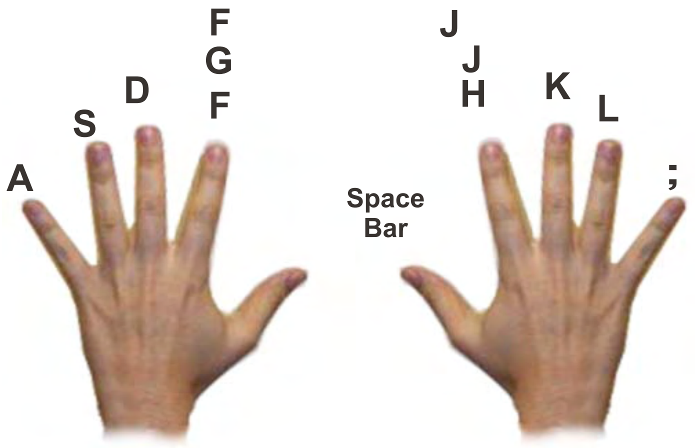


LEARNING PRACTICES : BUDGET BOOK

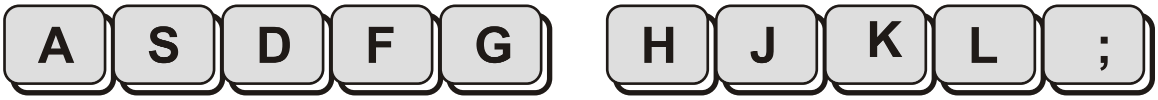
FIRST EXERCISE	-	LESSON I :	asdfgf	;lkjhj
SEND ON EXERCISE	-	LESSON II :	awerqfa	;oiupj;
THIRD EXERCISE	-	LESSON III :	gftfrf	hjyjuj
FORTH EXERCISE	-	LESSON IV:	azxcvfa	lkmnbj
FIFTH EXERCISE	-	LESSON V :	abcdefghijklmnopqrstuvwxyz Zyxvutsrqponmlkjihgfedcba	
SIXTH EXERCISE	-	LESSON VI :	NUMBERS –(123454 098767)	
SEVENTH EXERCISE (LEFT & RIGHT)	-	LESSON VII :	USING THE SHIFT KEYS	
EIGHTH EXERCISE	-	LESSON VIII:	PRACTICING IN SENTENCE FORM	

4. FIRST EXERCISE - LESSON - 1

asdfgf ;lkjhj asdfgf ;lkjhj asdfgf ;lkjhj asdfgf ;lkjhj



A and ; - by using little fingers (left and right respectively)
s and l - by using ring fingers
d and k - by using middle fingers
f and j - by using forefingers
g and h - by using forefingers



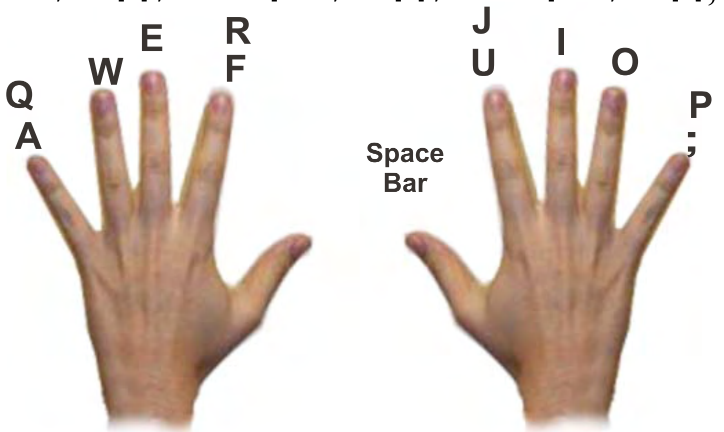
TYPE THE FOLLOWING AND PRACTICE AS PER THE INSTRUCTION OF THE TEACHER:

asdfgf ;lkjhj asdfgf ;lkjhj asdfgf ;lkjhj asdfgf ;lkjhj
asdfgf ;lkjhj asdfgf ;lkjhj asdfgf ;lkjhj asdfgf ;lkjhj
asdfgf ;lkjhj asdfgf ;lkjhj asdfgf ;lkjhj asdfgf ;lkjhj
asdfgf ;lkjhj asdfgf ;lkjhj asdfgf ;lkjhj asdfgf ;lkjhj
asdfgf ;lkjhj asdfgf ;lkjhj asdfgf ;lkjhj asdfgf ;lkjhj

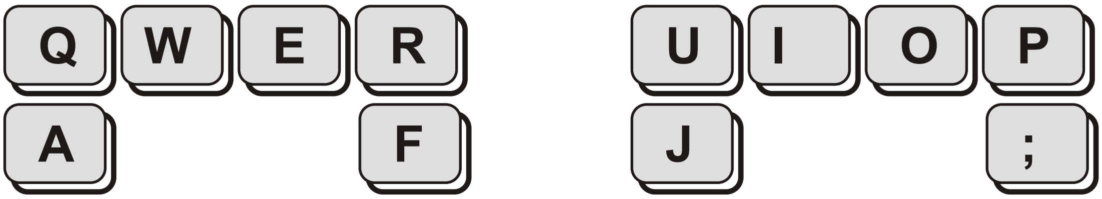
ask	fad	alsas	shad	lads	flags	flask
jag	fag	fall	hash	glad	galls	salad
jak	had	gaff	dash	gall	flash	slash
sad	lad	adds	lash	hall	lakhs	dhalls
dad	asks	alas	dall	fall	glass	shall

SECOND EXERCISE - LESSON - II

awerqfa ;oiupj; awerqfa ;oiupj; awerqfa ;oiupj;



a and ; - by using little fingers (left and right respectively)
w and o - by using ring fingers
e and i - by using middle fingers
r and u - by using forefingers
q and p - by using forefingers
f and j - by using forefingers



TYPE THE FOLLOWING AS PER THE INSTRUCTION OF THE TEACHER:

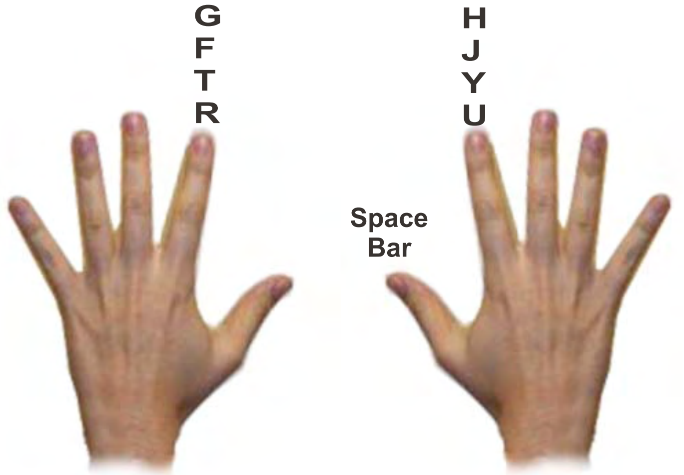
awerqfa ;oiupj; awerqfa ;oiupj; awerqfa ;oiupj; awerqfa ;oiupj;
awerqfa ;oiupj; awerqfa ;oiupj; awerqfa ;oiupj; awerqfa ;oiupj;
awerqfa ;oiupj; awerqfa ;oiupj; awerqfa ;oiupj; awerqfa ;oiupj;
awerqfa ;oiupj; awerqfa ;oiupj; awerqfa ;oiupj; awerqfa ;oiupj;

TYPE THE FOLLOWING WORDS EACH 5 LINES:

fish	dirks	oldest	apple	grade	falls	Kodak	rails	jaded
dead	usual	sales	filed	legal	lease	lakes	agile	isles
ahead	larks	roses	hedge	forks	skill	rupee	grass	would
alpine	jaded	liked	equip	quail	jokes	asked	walks	fiddle
saddle	larger	require	defiles	drawls	refresh			

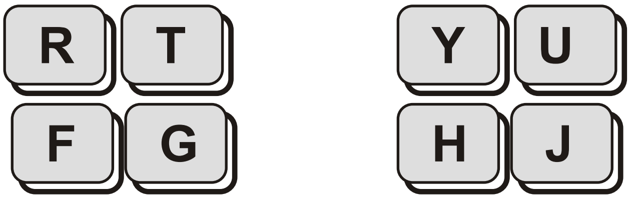
THIRD EXERCISE - LESSON - III

gftfrf hjyjuj gftfrf hjyjuj gftfrf hjyjuj



gftfrf hjyjuj gftfrf hjyjuj gftfrf hjyjuj

g	and	f	-	Fore finger
t	and	f	-	Fore finger
r	and	f	-	Fore finger
h	and	j	-	Fore finger
y	and	j	-	Fore finger
u	and	j	-	Fore Finger



TYPE THE FOLLOWING AND PRACTICE AS PER THE INSTRUCTION OF THE TEACHER:

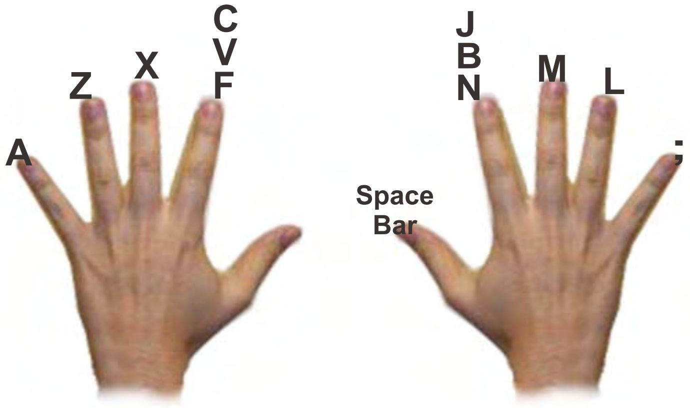
gftfrf hjyjuj gftfrf hjyjuj gftfrf hjyjuj gftfrf hjyjuj
gftfrf hjyjuj gftfrf hjyjuj gftfrf hjyjuj gftfrf hjyjuj
gftfrf hjyjuj gftfrf hjyjuj gftfrf hjyjuj gftfrf hjyjuj
gftfrf hjyjuj gftfrf hjyjuj gftfrf hjyjuj gftfrf hjyjuj

TYPE THE FOLLOWING WORDS EACH 5 LINES:

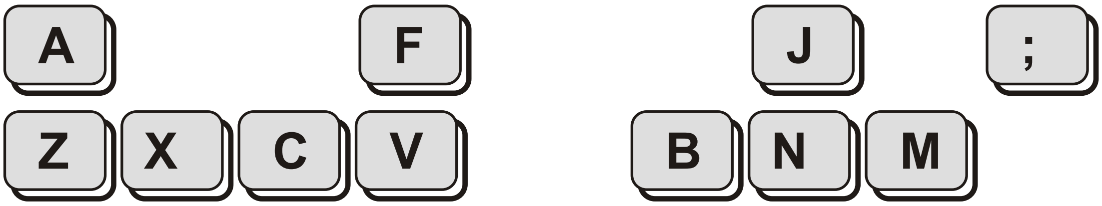
lawyers	desired	prepare	feathery	repeated
etiquette	yesterday	desire	waggish	typist
kettle	further	quoted	ledger	outdoor
pleased	theatre	tortuous	gallery	opposed
outflow	priority	freehold	thorough	dearly
assisted	adopt	allowed	ploughed	typewriter

FOURTH EXERCISE - LESSON - IV

azxcvf lkmnbj azxcvf lkmnbj azxcvf lkjmnbj



a			-	Little finger
z	and	l	-	Ring finger (left & right)
x, k	and	m	-	Middle finger
c, v	and	f	-	Fore fingers
n, b	and	j	-	Fore fingers



TYPE THE FOLLOWING AND PRACTICE AS THE INSTRUCTION OF YOUR TEACHER:

azxcvf lkmnbj azxcvf lkmnbj azxcvf lkmnbj azxcvf lkmnbj
azxcvf lkmnbj azxcvf lkmnbj azxcvf lkmnbj azxcvf lkmnbj
azxcvf lkmnbj azxcvf lkmnbj azxcvf lkmnbj azxcvf lkmnbj
azxcvf lkmnbj azxcvf lkmnbj azxcvf lkmnbj azxcvf lkmnbj
azxcvf lkmnbj azxcvf lkmnbj azxcvf lkmnbj azxcvf lkmnbj

TYPE THE FOLLOWING WORDS EACH 5 TIMES:

cat	jack	colour	neither	enemy	boat	Calcutta
not	have	joints	calling	voted	very	vineyard
met	wind	nerves	enlarge	money	move	material
men	verb	verbal	someone	marry	give	sterling
bent	joint	jackets	examine	thousand	cylinder	assessment
king	carry	jumbled	examined	struggle	possible	beginning
zeal	night	booklet	gracious	grizzled	frequent	meanings
zero	tonic	cutting	becoming	zodiacal	exponent	doubtless

FIFTH EXERCISE - LESSON - V

TYPE THE FOLLOWING ALPHABETS FOR FINGERING PRACTICE:

abcdefghijklmnopqrstuvwxyz., ,.zyxwvutsrqponmlkjihgfdcba
abcdefghijklmnopqrstuvwxyz., ,.zyxwvutsrqponmlkjihgfdcba
abcdefghijklmnopqrstuvwxyz., ,.zyxwvutsrqponmlkjihgfdcba
abcdefghijklmnopqrstuvwxyz., ,.zyxwvutsrqponmlkjihgfdcba
abcdefghijklmnopqrstuvwxyz., ,.zyxwvutsrqponmlkjihgfdcba
abcdefghijklmnopqrstuvwxyz., ,.zyxwvutsrqponmlkjihgfdcba
abcdefghijklmnopqrstuvwxyz., ,.zyxwvutsrqponmlkjihgfdcba
abcdefghijklmnopqrstuvwxyz., ,.zyxwvutsrqponmlkjihgfdcba
abcdefghijklmnopqrstuvwxyz., ,.zyxwvutsrqponmlkjihgfdcba
abcdefghijklmnopqrstuvwxyz., ,.Zyxwvutsrqponmlkjihgfdcba

TYPE THE FOLLOWING WORDS EACH 5 TIMES:

Cosmo	instant	youthful	personnel	correspond	xanthophylls
Quota	zigzags	up-board	witnessed	fulfilling	contemplate
necy.,	morning	hitherto	pessimism	technology	distributor
etc.,	brevity	emphasis	peasantry	indulgence	formulating
viz.,	written	impulses	tolerance	privileges	controversy
doz.,	endorse	judgment	elevation	rejuvenate	sacrificing

TYPE THE FOLLOWING SENTENCES EACH FIVE TIMES:

1. Lost time is never regained.
2. Get- up early and do your work.
3. To-day's youth and to-morrow's old.
4. Age is a virtue when wisdom is with it.
5. Measure your word before it goes out of you.
6. My steps are measured.
7. A friend in need is a friend indeed.
8. Children are innocent and should be guided rightly.
9. Our Land has great sages who knew the eternal truth.
10. Truth never fails.

SIXTH EXERCISE - LESSON VI

LEARNING NUMERICALS: TYPE THE FOLLOWING NUMBERS AS PER THE INSTRUCTION OF YOUR TEACHER:

123454 098767 123454 098767 123454 098767

123454 098767 123454 098767 123454 098767

123454 098767 123454 098767 123454 098767

123454 098767 123454 098767 123454 098767

123454 098767 123454 098767 123454 098767

TYPE THE FOLLOWING NUMBERS EACH 5 TIMES:

153	4586	48766	1298	96842	67,492	9,18,17,615
765	9539	97530	6541	78646	65,431	10,87,43,111
187	7654	65431	2244	98761	78654	4,16,22,44,882
786	1009	28761	7755	87652	97531	9,34,53,05,090
440	5599	76542	4174	9442	805515	9,89,45,82,990

SEVENTH EXERCISE - LESSON VII

(USING OF SHIFT KEYS - LEFT & RIGHT)

TYPE THE FOLLOWING WORDS USING SHIFT KEY: EACH 5 TIMES:

January	February	March	April	May	June
July	August	September	October	November	December
Tamil	English	Tamilnadu	Andhra	Karnataka	Orissa
Maharastra	Delhi	Himalaya	Simla	India	Srilanka
America	Calcutta	Kolcatta	Tailand	England	Kuwait
West Indies	Africa	German	Russia	Rome	Kerala
Parthiban	Dikshaya	Anandan	Vidiya	Vijayanthi	Glory
Trinita	Feeba	Glory	Kumar	Balaji	Shyamala
Freeda	Joel	Royston	Rajini	Kamal	Sivaji

Superintendent	Confidential	Government	Schedule	Notification
Secretary	Proceedings	Reference	Subject	Enclosure

5. TYPING PRACTICE : LESSON VIII

(A). TYPE THE FOLLOWING SENTENCES EACH TEN TIMES

1. Pack my box with five dozen liquor jugs.
2. A quick brown fox slowly jumped over the lay dogs.
3. Five prizes were quickly distributed by the judge to examiners.
4. Handy Jack's quixotic laziness may grow to be far expensive.
5. Gay men with extra pluck and zeal would often have quiet job.
6. Black market fugitive should be quickly expelled with zeal.
7. May we have Jack squires fix the big lamps for Andy Ziegler?
8. Have you seen my brother-in-Law Jayavendan?
9. The partition of India affected more than 506 of our people.
10. Balaji worked with zeal and vigour.
11. Joel & Subashini took their child on 2nd January 2005 for Kuwait.
12. Messers Parthiban & Co., Ltd were great toy makers.
13. The son got ¾ and the daughter Dikshaya ¼ of their shares.
14. The French Revolution war was in the year 1709

15 Received 5 sets of Typist's Tables (2'-5”) & chairs (18” 6”)

16 Now the cost of gold is very high. (One gram=Rs.1,500/=)

17 Every Indian should say “No Partition”.

18 Leave 2 spaces after (.) and (?)

19 Punctuation should be marked carefully.

20 Character builds a good family.

21. Service to the Community is humanity.
22. Anandan got cent percent result in his subject.
23. We must be proud of our Nation.
24. Untouchability is a sin. Untouchability is a crime and also inhuman.
25. Time and tide wait for none. So, make use of the time. All the best.

TYPING PRACTICE : LESSON IX

(B). Type the following in double line spacing with a margin of ten degree:

Type the following paragraphs each five times:

Our National Flag has bite Ashok Chakra on it. This wheel is symbol of DHARMA. It we always do the right things, we follow DHARMA. The twenty four spokes in the wheel show the differences between our-people. A small circle connects these spokes. It shows that we are one. The wheel also shows that we are going forward.

Our flag is a tri-colour. Saffron is the symbol of sacrifice and a strong mind. White is the symbol of purity, love and peace. Green is the symbol of plenty and joy. We hoist and salute our flag. We are ready to make sacrifices for our country. We want peace and progress. We want to be pure.

Our 'National Anthem' is a song of the great poet Tagore. It was his prayer song. He sings about the people, mountains, rivers and seas of India. He says that God is the master of all these and everyone and everything in India praise him. We sing this song in colours with respect.

All of us salute our National Flag and sing our National Anthem. This shows that we are one nation. We also promise to love and respect our country, our parents, elders, teachers and all others in India.

SOME ADVANTAGES OF HIGH SELF-ESTEEM

There is a direct relationship between people's feelings and their productivity. High self-esteem is evident in respect for one's self, others, property, law, parents and one's country. The reverse is also true.

LOW SELF ESTEEM

How do we recognize poor self-esteem? What are the behavior patterns of a person with poor self-esteem? The following is a brief list, which is not all inclusive but is indicative.

TYPING PRACTICE : LESSON X

(C). Scripts to be Practiced by typing the following:

1. A leads letters Ancient Lord
   Leads and Lords the entire world.

2. Lore worth learning learn flawlessly
   Live by that learning throughly.

3. That lore is Vain which does not fall
   At his good feet who knowth all.

4. In grace and gain the house excells
   where love with virtue sweetly alwdls.

5. Industry adds Prosperity
   Indolence brings but Poverty

6. A father's duty to his son is
   to seat him in the front of the wise.

7. A mother hearing her son's merit
   delight more than when she begot.

8. A help rendered in hour of need
   though Small is greater than the world.

9. Doing good turns Put them to shame
   Thus Chide the evils who do harm.

10. what is truth the question be
    It is to speak out evil free.

11. my dear brothers and sisters, take Note of this: Every one should be quick to listen, slow to speak and slow to become angry, for man's anger does not bring about the righteous life that God desire. Therefore, get rid of all moral filth and the evil that is so Prevalent and humbly accept the word Planted in you, which can save you.

6. SPEED PRACTICE

Type the following in double line spacing with a margin of ten degrees:-

Education and training in cosmetology takes you straight to the world of glamour and excitement and allows you to explore the opportunity to work with hair, skin or mails depending upon your choice. The different combinations of chemicals allow to create the right type of product for hair, skin or mails. Thought the possibilities in the field of cosmetology are endless, you do require education or training in this field to be able to find the right path for yourself. The aim of a make-up artistes to brining out beauty without making it look like a disguise. Make-up artists apply cosmetics to enhance a client's appearance as also create any image a particular job calls for. The artist should be inclined artistically like blending, shading or creating.

A make-up artist can establish himself in a salon with a private clientele, become make-up director for a prestigious department store, represent a line of cosmetics, work in Television and Movie production, find a position with a fashion magazine or work behind the scenes in theatre production. Operating as an independent free lancer allows you to create your own schedule or find employment with one company. The make-up artists should concentrate on chemistry and anatomy if they want to make it to the top. Theatre experience, especially a study of stage lighting can be really helpful. Six months to one year work experience in a good salon is important after training.

Volunteering your services to community theatres, fashion shows etc., will not only provide experience but also help in establishing contact with people who may be important to your career. Star Campbell Place a master of make-up artistry, says that achieving delicate effects takes years of concrete training. The more time you invest in preparing for this career the longer your career will be and the more you will get out of it. It allows you to be independent mobile and employable. You can begin by developing a portfolio that can be presented to a potential client. The portfolio can include before and after photograph so make-over you have performed, along with any awards or certificates you may have earned.

The job of Skin Care Specialist (Aesthetician) here is to offer treatments to perfect the look and health of the skin. The aesthetician can work in a salon, teach, travel giving demonstrations or become a consultant to a cosmetic company. The training for this job should be in a beauty salon which specializes in or emphasizes on facial treatments. These training courses are always short so he should make the best use of them. The specialist must read as much as possible about skin care so that there is a touch of authority in what he says.

SPEED PRACTICE

Type the following in double line spacing with a margin of ten degrees:-

The invention of paper is closely-linkedwith the history of human civilization. Although the modern printing industry is generally considered to have bon out of the invention of movable types of Johan Gutenberg in 1455, the Chinese had been printing on paper many hundreds of years earlier. Paper was first produced in China in about 105 AD when papyrus and parchment were being used in Mediterranean countries. Tortoise shell, bone metals, stones, bamboo slips, wooden tables and silk were used as writing materials in China before the invention of paper. It took centuries to perfect the technology of producing vegetable fibre paper. Initially, the raw materials used was hemp, rope ends, rags and worn out fishing nets etc. The oldest sample of paper from Wester Han Dynasty wasdiscoveredin1957 in Shaanxi Province of China.

The ancient Egyptians used papyrus as writing materials, which is derived from th plant Cypenus papyrus. The Papyrus was long cultivated in the Nile delta region in Egypt and was collected for its stalk or stem, whose central pith was cut into thin strips, pressed together and dried to form a smooth thin writing surface. Papyrus is a grasslike aquatic plant that has woody, blunt triangular stems and grows up to 4.6 cm high in quietly flowing water. The triangular stem can grow to a width of 6 cm. Th e Egyptians used the stem of the pyrus plant to make sails, cloth, mat, cords and above all paper. It was adopted by the Greeks and was used extensively in the Roman Empire

It was used for the production of legal documents. Pliny the Elder, gave an account of the manufacture of paper from papyrus. The fibrous layers within the stem of the plant were removed and a number of these longitudinal strips were placed side by side and then crossed at right angles with another set of strips. The two layers formed a sheet, which was then dampened and pressed. Upon drying the glue-likesap of the plant acted as an adhesive and cemented the layers together. The sheet was finally hammered and dried in the sun. A number of these sheets were then joined together with paste to form a roll, with usually not more than 20 sheets to a roll. As time passed, other fibrous plants started replacing papyrus.

By the turn of 3rd Century A.D papyrus had already begun to be replaced by less expensive velum or parchment in Europe. Parchment is said to have been invited in the 2nd Century. B.C., The name apparently derived from the ancient Greek city of Pergamum. It is the processed skin of certain animals mainly sheep.

SPEED PRACTICE

Type the following in double line spacing with a margin of ten degrees:-

In 1452, Christopher Columbus ignored advice that the Earth was flat and tried to reach India by sailing west rather than east. He may have muddled his continents, but he didn't fall off the edge, the Earth's surface is of course curved. A similar question has been bothering cosmologist for nearly a century is the universe flat Researchers now announce that the answer is yes. Common sense tells us that flying through space in a straight tells us that flying through space in a straight line gets you further and further away from your starting point. But common sense and cosmology (the study of the universe) have little in common. Researchers have no difficulty accepting a universe in which space itself is curved. Fly for long enough in curved space and you could find yourself back where you started But the curvature of a universe does not just bend the brain, it also has a far more worrying conclusion.

A universe that contains enough mass to give it a positive curvature is doomed to a fiery end. It will gradually stop expanding and begin to shrink, ultimately imploding in a cataclysmic big crunch. A universe, with zero curvature, a flat universe, escapes this demise. Conditions in the young believed to have been rather like being rather like being inside the sun. Super-hot protons and electrons were densely packed, too excited to form any stable structures. Radiation was trapped, endlessly bouncing around, in this seething sea of particles. As this proto universe grew, it gradually cooled. When it was about 3,00,000 years old, things finally settled down enough for atoms to form.

The radiation that had been trapped finally escaped, an era known as decoupling. Since then, it has been racing through the cosmos largely keeping itself t itself. Over billions of years, it too has cooled with the expanding universe and what must originally have been energetic ultra-violet rays now reach us as feeble microwaves at just a few degrees above absolute zero. Known as the Cosmic Microwave Background Radiation or CMB this radiation hold important clues about the early universe, Tiny differences in density of the baby universe caused tiny differences in the temperature of the escaping radiation. These density fluctuations have grown into the clusters of galaxies we see to day

Because of the relative simplicity of the early universe, physicists believe they have a good understanding of its mechanisms. Armed with reliable measurements of the CMB they would be able to wind back the clock and calculate the state of the universe at decoupling and hence work out its density and curvature. Researchers finally got the date they needed just few months ago when an experiment known as Boomerang.

SPEED PRACTICE

Type the following in double line spacing with a margin of ten degrees:-

The word virus is too familiar to us and everybody would like to avoid coming in contact with a virus. This is because viruses cause diseases not only in human beings but also in animals and plants. Virus is a Latin word meaning slimy liquid or poison. The list of diseases caused by viruses is a long one. Perhaps the most dreaded disease caused by viruses in human beings is Acquired Immune Deficiency Syndrome (AIDS). Some of the other diseases caused by viruses in human beings are infantile paralysis, dengue, hepatitis B, influenza, common cold herpes yellow fever and small pox. Viruses are parasites. They need a living cell host for reproduction. Some viruses in fact bacteria only and they are known as bacteria-eaters.

The biological nature of virus was first indicated by a Russian scientist Dimitry. Ivanovsky and a Dutch scientist Martinus W.Beijedrinck in the last decade of the nineteenth century. All viruses contain nucleic acid either DNA or RNA and protein . it may be noted that living cells contain both RNA and DNA but a virus has only one of the two. Based on the type of nucleic acid that a virus contains, it is classified as DNA or RNA virus. The size and shape of virus are determined by the amount and arrangement of nucleic acids and proteins. They vary in diameter from 20 nanometres to 400 nanometres (one nanometer is one billionth of a metre). Viruses are too small to be seen with naked eyes. With a few exceptions they cannot be seen even with ordinary or optical microscope.

The vaccinia virus can be visualized under a powerful optical microscope. Viruses come in various shapesrods, threads, spheroids, polyhedrons and tadpole-like structure. Some viruses come in combined shapes, for example, a virus may have a polyhedral head attached to a rod-like tail. The infective part of a virus, when it is outside the host ell is called the virion. It contains atleast one protein synthesized by a specific gene of the nucleic acid of the virus. All viruses have a protein coat called a capsid around the nucleic acid. Some virus like disease causing organisms which have only nucleic acid and no structural proteins are known as viriods. It protects the nucleic acid of the virus from digestion by enzymes called necklaces.

It help the virion to penetrate through the cell surface membrane or in some cases to inject the infectious nucleic acid into the interior of the host cell. It provided sites on its surface which recognize the receptors on the surface of the host cells for attaching the iron. Virus is host specific, that is. A virus may not harm one type of host but can severely damage another.

SPEED PRACTICE

Type the following in double line spacing with a margin of ten degrees:-

Land and Labour in modern economic parlance are the basic factors of creation on this planet. Between the two, labour is supreme, for it is he who makes conscious and deliberate efforts to unravel the laws and mysteries of land and makes use of them for his own development. Indeed, his own development is the be-all and end-all of his entire conscious effort. Looked at in this light, human development has been the objective of human Endeavour ever since Adam and Eve first appeared on this earth. Yes in the beginning, the thrust of human Endeavour was in the direction of spiritual development, but now it is in the direction of material development.

In the earlier years, it was primarily the responsibility of an individual to develop himself, but now it has become the responsibility of the State to arrange for all round development of human beings. This has put human beings in new light. The shift in emphasis from individual effort and spiritual development to State planning and material development has turned human into a factor of production an economic. Resource to be brought up developed and used for material development of the country as a whole. Population growth at an alarming rate comes in the way of these social objectives in a big way. Rapid growth of population, therefore, has rightly been cause of concern in jour country since the early fifty's. However, popular perception in this regard has undergone a sea change over the last couple of years.

In early fiftys, socio-economic implications of population growth were a matter of concern largely in the context of the argument that rapid population growth is an obstacle to development. But now it is increasingly recognized that the relationship between population growth and development is not that simple it is rather much more complex. In 1994, it has been forcefully argued and accepted that rapid population growth itself is in many ways the result of a lack of development. In course of time many other dimensions have been added to this relationship which was once viewed to be unidirectional. After the ICPD Conference population issue is placed in a much large context of sustainable development. Over the years, the concept of development little has undergone a change.

In the context of people-centered development, many dimensions like gender equity, women's empowerment, environmental degradation, uplift of the weaker sections and human resource development have assumed considerable significance. From this point of view, it is essential to look in to the implications of population.

SPEED PRACTICE

Type the following in double line spacing with a margin of ten degrees:-

There are different forms of governments in the world like, monarchy, democracy and dictatorship. Every government should have a good administrative system or machinery to levy and collect taxes, maintain law and order, to administer justice and to implement various schemes, for effective administrative machinery was felt, in the ancient days also. There were excellent administrative set up even at the village level, in India in the ancient days. Similarly the Romans gad ab excellent administrative set up, similarly also the British, french and the Greeks. However the nature of recruitment and appointment to the various posts, were more on hereditary ;basis than on any other consideration, in those days

The duties of the Governments in the ancient days were limited to the extent of providing security to the people, and defending the country from foreign invasion. A small and selected administrative machinery was sufficient in those days but the science and technology have changed the entire set up of the society. The living conditions of the people have improved considerably. The provisions of hospitals, educational institution, accommodation, highways and transport etc. Have became the primary duty of any modern government. As a result, the administrative machinery has not only to be geared up to meet the demand but also transformed to suit the modern conditions.

The administrative machinery has therefore been divided into a number of departments like civil administration, police, education, health, engineering and judiciary etc. In the present days. The qualifications have been prescribed for every one of the posts each department along with the procedure for recruitment and appointment to those posts. The service commissions recruiting boards have been constituted in all the countries, to recruit the persons, for the various posts in the different departments. They have been accorded status free from governmental interference and security of tenure to the members forming the board with a view to ensure that the recruitment is made impartially without fear or favour. These bodies conduct examinations, interviews and select the suitable candidates to the various posts grades.

The modern administrative system has become much more important in these days of the decorative governments. The representatives elected by the people need not necessarily have neither administrative experience nor talent. The representative so elected , therefore have to depend mainly on the administrative machinery to discharge their duties, in their elected offices as ministers.

SPEED PRACTICE

Type the following in double line spacing with a margin of ten degrees:-

Edward Janner was a doctor in England. He became world-famous through his vaccination for Small Pox. Janner was born on 17th of May, 1749 in Berkely at Glon Cestershire, England. His father was a clergy. Janner was sent to a local school for elementary education when he showed keener interest in the study of medicine. Studying for medicine in those days was an ordeal: one had to get one-self trained under an eminent surgeon. Later, he had to study in a medical college for a period of 2 years. In a small village called Sedbury, near Bristol, Janner underwent training in surgery under an able surgeon. At the age of 21, he went to St. George hospital in London, where he had to study further and work. After his graduation in medicine, Janner went back to his native home to practice medicine.

During his training period a milkmaid approached her trainee surgeon to get herself treated for Cowpox. Cow Pox was a mild sickness common to prevail among mosfc of the milk-vendors. However Janner momentously thought of conducting investigations on Cow Pox. By this time, his training was getting over and Janner could take up the issue more vigorously. After many years of practice in his native home and occasional investigation into the cow pox that had afflicted his milk-maid. Janner trailed to achieve any type of success. He also started working on Small pox with the cases that had come to his clinic and at last it was possible for him "to succeed in getting it solved and treated.

He published his work in 1796 after having studied 27 cases. He noticed that in the people who had cow pox they did not contact small pox, after they were inoculated the fluids of cox pox. This led him to undertake a high risk of inoculating an eight year old Jimmy Phipps with cox pox virus which he extracted from the fingers of the milkmaid who had cow pox. The boy contacted cox pox. After seven weeks, he inoculated small pox virus into the same boy, which he extracted from the patient of small pox. But the boy did not now contact small pox. Now, he inoculated the same virus into another healthy person, he contacted small pox. The he proved beyond doubts that people suffering from cox pox would not contact small pox and they contacted cox pox from the cows.

In those days, people believed that one a person had small pox and recovered from it is he would never get small pox again. This was for truth in most of the cases. In other wards, people and had believed that cox pox and small pox are two different infections while he proved that people will not be affected in case they are inoculated with the attenuated viruses of cox pox.

SPEED PRACTICE

Type the following in double line spacing with a margin of ten degrees:-

Indian scientists deserve kudos for having developed an appropriate technology in order to meet the fuel requirements of the rural folk by recycling locally available organic resources. Rapid changes and modifications have taken place since 1950 when the floating dome model with counter weights was developed by the Indian Agricultural Research Institute. It provides centre guide system for smooth movement of gas holder and supply of gas at constant pressure/ This applied technology was looked upon as only of academic interest of in the early forties but has turned out to be of immense importance since the last decade due to spiraling prizes of petroleum products, chemical fertilizers and other sources of energy.

This technology gained importance also on account of the ever-rising demand for petroleum products which can only be met by enhanced imports leading to a further drain on our meagre foreign exchange resources. The recycling of indigenous resources has at least met a fraction of our demands and acted as a deterrent on this count. The gas plant is a boon to the Indian farmers. The two main products of the project from which material gains accrue are enriched compost manure and Methane gas made from local resources available in the villages. Whereas compost manure helps to meet the fertilizer requirements of the farmers in a more economical and efficient manner and thereby boost agricultural production, biogas is used for cooking and lighting purposes. It is also used in case of larger plants, as motive power for driving small engines. In fact the wide scale utilization of Gobar the most appropriate answer to solve three national inter-connected major problems with which the country is faced today food, fertilizer and fuel. The anaerobic decomposition of organic wastes leads to the production of methane, which can be readily used as an energy sources. The mixture of methane, carbon dioxide, hydrogen and nitrogen produced in this manner is called biogas. The complex organic molecules present in the organise wastes are first broken down to simpler compounds such as acetate, hydrogen oxygen, etc. By the action of a number of different micro organisms.

The simple compounds so produced are utilised by methogenic bacteria to produce methane. Methogenic bacteria can hydrogen and carbon dioxide for methane production. There are two major advantages of this type of energy source, which are the production of gas and the residual manure.

SPEED PRACTICE

Type the following in double line spacing with a margin of ten degrees:-

Indian planning has shifted its emphasis from self-sufficiency in food-grains to rural development through agricultural development. Though it continues to be the traditional sector, progress has become rapid on the agricultural front. A continuous flow of technology is coming out of the research stations. To get the best out of it, information about its implication on decision behaviour and policy should be made available to the farmers without time lag. Policies and programmes in various sectors and levels and their justification depend for effectiveness on dependable knowledge. Operational research in agriculture an rural development must observe conditions which are changing rapidly due to technological break-through the data on these are not available from the existing sources.

Information has to be updated frequently foe an effective information system for agricultural development. The centre for agricultural and rural development studies of the Tamil Nadu Agricultural university established a rural observatory in support of its developmental research with the specific objectives of carrying out the survey of resources, production. employment and organisational pattern. Tamil Nadu was divided into eight regions based on agro-economic Conditions. To have rural and urban contents, one municipality, one town panchayat and one village panchayat were selected in each of the above three regions. These centres formed the observation centres for the study.

The data were collected and village level information showed that irrespective of the size of the observation center, the distribution of population among male and female is almost; equal. The percentage of weaker section depends on the nature of the center. The prosperity of a region depends on industrial development also industrial were concentrated in the municipalities and not in rural areas. The availability of infrastructural facilities resulted in the location of industries in urban centres. The length of road and the number of vehicles operating is directly related to the degree of urbanisation. The bullock cart formed the major mode of transport in town and village panchayats. Regulated markets, co-operative marketing societies and even commission mandies are operating with urban base only. This shows the need for dispersal of purchase and sale centres to help the villagers.

The detailed household survey showed that while more than forty percent of the houses were thatched ones about sixty percent were tiled houses. As the degree of urbanisation increased, the percentage of living in owned houses decreased.

SPEED PRACTICE

Type the following in double line spacing with a margin of ten degrees:-

The major objectives of nationalisation of commercial banks as set out by the prime minister may be summarised that removing the control over commercial banks by few large industrial houses. Providing adequate credit to the hitherto neglected sectors such as agriculture, small business, small scale and professional. To introduce professional management in commercial banking. To provide adequate training and reasonable service conditions for bank employees. The banks have really lived up to the expectations of parliament and the prime minister

The commercial banks have become powerful institutions contributing for agricultural and rural developmental and also the upliftment of weaker sections of the rural community. Some of the significant achievements are rapid branch expansion expansion, of rural credit, strengthening of the co-operative sector and support to village and rural industries. The commercial banks in India had organised themselves along the lines and patterns of British banks. They are more comfortable with trade and large industrial houses than with the agriculture sector and small industries. A number of changes has taken place in mral areas after commencement of the planning era. The concept of rural developmental has nether been concise consistent. Gandhiji's ideas are different from those of jawaharlal Nehru and they are again different from the ideas of indira gandhi.

These three dominant personalities, who played a significant role in the economic development of the country, have left their imprints. Tumultuous and far reaching changes have taken place after the nationalisation of commercial banks. Even before 1969, agriculture and allied activities were experiencing rapid growth under suggested five year plans. The national credit council pointed out a large credit gap in the rural economy. It has suggested measures to improve and monitor the flow of credit to the rural sector and also recommended a multi agency approach instead of depending on the co-operativecredit societies alone. While the banks prior to nationalisation were reluctant to enter rural areas and lend for rural acitvities in support of various governmental programmes.

Even during the British rule, the Government had recognised the importance of agriculture and developed the co-operative organisations to take care of agricultural credit. At that point of time and perhaps up to 1975,rural development was seen merely as agricultural development.

SPEED PRACTICE

Type the following in double line spacing with a margin of ten degrees:-

Classica dance in India adheres to a rigorous code, though some minor improvisations have been attempted and accepted in recent times. According to the Hindu mythology, when Lord Sive shook a hand drem, the world beatits first rhythm. And as he moved his body in tune with its beat, the universe came into being. The dancing Siva is known as Nataraja and all classical dancers invoke Nataraja as the symbol of cosmic energy. In India, the e\aesthetic theory is that dance, music and drama are inseparable, This principle was first enunciated in Bharatas treatise Natya Sastra, written in the 3rd century; B.C.Indian dance essentially tells a story poetically, with movements of hand mudras and foot and gesture of eye and row abhinaya, all this is supplemented and complemented by a set pattern of music.

A characteristic feature of the classical dance is the intricate footwork, tala which is emphasized by the jingling of ankle-bells by the dancer as well as the rhythm maintained by the drummer. There are four main schools of Indian traditional dance. By far the oldest of the classical styles is Bharata Natyam, which follows the ancient treatises more closely than any other style. With its roots in Tamilnadu, this dance, which has retained its purest form is usually performed solo and comprises movements of pure rhythm, reamatic rendering of a story or depiction of a mood Bharata Natyam was once part of therites of worship in temples and was performed by dancing girls attached to temple.

Kathakali frkom kerela is a spectacular and powerful dance-drama, in which the artists don an elaborate make-up and enact tales from the epics. Kathak began as a religious performance and under Mughal Ipatronage in the 16th and 17th centuries evolved as a court-dance. The Manipuri style of Manipur in eastern India, revolves round the pranks of Krishna when he was young. Some of the other schools of Indian dance are the Kuchipudi of Andhra Pradesh, Odissii of Orissa, Mohini Attam of Kerala and the Yakshagana of Karnataka. For variety, colour and drichness of emotion, the Inian dance forms have pdractically no parallel in any other part of the world. In fact, Indian classical dances have traveled oout of the country to influehelp the art forms of neighbouring Sri Lanka, Indonesia, Thailand and even Japan and America.

India has also a variety of Tribal and Folk dances. To the tribals and village folk, dance seems to be the most natural medium of expression. Occasions like marriages. Births, festivals, fairs, harvests and hunts are all marked by dancing. The more popular of the folk dances are the Bhangra (Rajasthan), Ghumer and Gibba (Punjab), Garba (Gajarat), Kolattam (Tamilnadu and Karnataka) and Kaikottikali(Kerala).

SPEED PRACTICE

Type the following in double line spacing with a margin of ten degrees:-

During the period 1895 1905, many path breaking discoveries were made which not only ushered in revolutions in several disciplines of science but also changed our very understanding of some of the prevailing concepts in science. The discovery of electron by Joseph John Thomson in 1897 was one such discovery. In fact, the discovery of electron is one of the greatest discoveries of modern physics. The electron was the first of fundamental constituents of all matter to be proposed and in the last hundred years. It has withstood all the tests of elementarily.

The discovery of electron has not only revolutionized scientific thought but also our ways of life. Once electron was proposed as a fundamental constituent of matter, the scientists started building models of atomic structure. Atoms in their normal states are not electrically charged. So, as the electrons are negatively charged, it became obvious that the atoms also dairy a charge of positive electricity to counterbalance the negative charge. Gradually, the physicists built up an idea how these charges were arranged in an atom. Among these models, the Rutherford model had the most lasting influence. Rutherford discovered that the atom consisted of a heavy positively charged core surrounded by electrons. The existence of proton was recognized in 1914.

In 1931, neutron was discovered by James Chadwick and the number of elementary particles rose to three i.e. electron, proton and neutron. However, with the advent of particle accelerators, hundreds of so called elementary particles were discussed. To scientists, it was a real shock. They were not prepared to face so many elementary particles. From the very beginning of human civilization, the idea of fewer basic constituents of nature has fascinated man. To over come this complexity, a new model viz. quark model was proposed. According to this model, all the particles experiencing strong interactions are made of quarks was experimentally supported in 1969. Today the elementary particles and interaction between them are described the Standard Model.

According to this model, elementary particles are classified as leptons i.e. these particles interact with electro magnetic and gravitational fields but beyond that they interact only through weak interactions, hadrons and gauge bosons. Le[tons and hadrons interact by exchanging gauge Bosons

SPEED PRACTICE

Type the following in double line spacing with a margin of ten degrees:-

Many illnesses are caused by irregular meals or from the habit of eating whatever catches the fancy or happens to come in handy. Such "carelessness" results in decreased efficiency too. You are what you eat. Hence, eating good means on time is very important. Scientific meal planning is knot too difficult. It may appear complicated to a beginner when he or she is told that a complete and balanced diet is essential to meet the needs of the individual. The needs of a person depend on his or her age, sex, body size type, temperament, nature of work, the climate and the it ate of health of his or her mind and body. The term daily diet means all the food a person eaters during the day. Die ; may refer to either food ordinarily eaten or that selected with reference to a particular state of health. A few simple rules combine all the requirements, and a little practice makes direct meal planning second nature.

Nutritionists define good meals as those which supply nutrition to meet body needs, protect the body against disease and are enjoyable to eat. With the knowledge of nutrition, one can easily choose food to fulfill the first two requirements; yet how much one enjoys one's food depends on one's taste and attitude in eating. You can train yourself to enjoy all essential foods. It is not clearly understood why some children seem to dislike certain foods. But experience shows that a persistent effort I overcoming most dislikes is rewarding.

Researchers have discovered that the custom of three meals a day is based on convenience and not on biological needs. Tests show that blood sugar concentration and muscular efficiency are lowest before breakfast and remain at this level until a meal is taken. After eating, blood sugar rises sharply and efficiency increases but the two fall again to a low level within two-and-a-half to four hours unless another meal is taken. From these facts, it appears that a high level of energy can be maintained by eating every two and a half to three hours throughout the day. Experiments on factory workers have proved this to be true. Today, many factories, offices and schools have incorporated in their schedules a "nutrition" or "snack" period mid-forenoon and mid-afternoon,

The bed time snack is a matter of individual preference. Top avoid interfering with sleep, it should either be omitted or be very light and contain light food such as milk or fruit. An over weight person and the elderly should avoid food before retiring. It is unfortunate that breakfast is so often slight. People who stay in bed. Late, rush with dressing and eat on the run.

SPEED PRACTICE

Type the following in double line spacing with a margin of ten degrees:-

Rene Descartes was born on March 31, 1596, in France. His father was a member of the nobility. He lost his mother a year after his birth. He was raised by his maternal grandmother and by a nurse to whom he was devoted. In 1606, he entered a Jesuit College that was established for the education of the young nobility and completed in 1614 the eight-year course of studies. His studies left him with a felling of dissatisfaction at the extent of his own ignorance. But he left behind a mark of extreme brilliance. He spent the period from 1618 to 1626, divided between participation in many campaigns of the Thirty Years War in D8tch. He never married. He was doing military service without salary, Descartes spent most of his time in the study of mathematics. By the age of 22, he began to develop his analytical geometry under the title 'La Geometric' by which the mathematicians still affectionately refer to it.

It set forth the idea that a pair of numbers can determine a apposition on a surface; one number x as a distance measured horizontally, the other y as a distance measured vertically. In the concept of co-ordinates, he gave a method commented to be 'the greatest single step ever made in the progress of exact sciences'. He started, in 1619, work on his magnum opus Discourse on the method of Rightly Conducting the Reason, which stamped him immediately as one of the great thinkers of his age. He postulated his notion of the unity of all science which was a revolutionary concept which contradicted the notion of Aristotle.

The book contained three minor appendices on the behaviour of lenses meteors and geometry. A 106 page foot note outlined analytical geometry, which he did it is an endless wavy line, the exact graphic equivalent of the pulsating ebb and flow of electric current in a power cable, which has practical application in electrical engineering.

Descartes showed, for instance, that all quadratic equations, when graphed as connected points, become straight lines, circles, ellipses, parabolas or hyperbolas. Going beyond the quadratic, he established that each class of equations of higher degree brings into being a whole new tribe figure of eight, hearts, hummocks and petal shapes.

SPEED PRACTICE

Type the following in double line spacing with a margin of ten degrees:-

Science affects the average man and woman in two ways already. He or she benefits by its applications, driving a motor car or omnibus instead of a horse-drawn vehicle, being treated for disease by a doctor or surgeon rather than a priest or a witch, and being killed with an automatic pistol or shell in place of a dagger or a battle-awe. It also affects his or her opinion. Almost everyone believes that the earth is round and the heavens nearly empty instead of solid. And we are beginning to believe in our animal ancestry and the possibility of vast improvements in human nature by biological methods. But science can do something far bigger for the human mind than the substitution of one set of beliefs for another, of inculcation of skepticism regarding accepted opinions. It was gradually spread among humanity as a whole the point of view that prevails among research workers and has enabled a few thousand men and a few dozen women to create the science on which modern civilization rests.

For if we are to control our own and one another's actions as we are learning to control nature, the scientific point of view must come out of the laboratory and be applied to the events of daily life. It is foolish to think that the outlook which has already revolutionized industry, agriculture, war and medicine will prove useless when applied to the family, the nation or the human race. Unfortunately, the growing realization of this fact is opening the door to innumerable false prophets who are advertising their own pet theories in sociology as scientific

Science is continually telling us through their mouths that we are doomed unless we give up smocking, adopt or abolish birth control and so forth. Now it is not my object to support any scientific theory, but merely the scientific standpoint. What are the characteristics of that standpoint? In the first place, it attempts to be truthful and therefore impartial. And it carries impartiality a great deal further than does the legal point of view. A good scientist will be impartial between Mr. Smith a tapeworm and the solar system. He will leave behind him his natural revulsion of the tapeworm, which would lead him to throw it away instead of studying it as carefully as a statue or a symphony and his awe for the solar system, which led his predecessors either to worship its constituents or at least to regard them as inscrutable servants of the Almighty, to exalted for human comprehension.

Such an attitude leads the scientist to a curious mixture of pride and humility. The solar system turns out to be a group of bodies rather small in comparison with many of their neighbors and executing the movements according to simple and easily intelligible laws.

SPEED PRACTICE

Type the following in double line spacing with a margin of ten degrees:-

The brain is the essential organ of mind. As the chief focus of the nervous system the brain, with its vast number of cells closely inter-linked, is related to all the tissues and organs of the body by means of nerves. The reception by the brain cells of messages from the various sense organs arouses what is called sensation and consciousness, which from a physiological point of view, is simply awareness of sensation. All mind functioning is therefore primarily dependent on efficient sense organs and healthy nerves to transmit impulses when these sense organs are stimulated.

In turn, consciousness depends upon the integrity of the brain cells and should these cells be injured, as in concussion from a blow or damaged by the poisons of alcohol or disease, then consciousness may be reduced or completely suspended. All forms of mental activity use up energy in then ever cells and this need is met with by an increased flow of blood containing nutriment to the brain triples between birth and adulthood- reaching a final weight of about 1 kilogram fro men and 1.3 kilogram for women. By the age of 50 though, it shrinks slightly, losing about 30 grams. There is no correlation between brain size and intelligence. A man's brain is usually slightly larger than a women's but in both sexes the brain makes up a similar proportion of total body weight. Two writers hold opposite records for brain size. The writers hold opposite records for brain size. The brain of the Russian author Ivan Turgenev weighed 2.012 kilogram.

The brain of the French writer Anatole France (1844-1924) weighed little more than half that figure, 1.017 kilogram. The grain is divided into two hemispheres, each a mirror image of the other. The right hemisphere controls the muscles of are receives information from the left half of body. The left hemisphere monitors are controls the right half of the body. In right handed people, the majority, the left side the brain is concerned with such skills reading, writing and talking. The right hemisphere deals with artistic activity and the workings of the imagination. In left handed people the functions the two hemispheres many be reversed. The average brain contains about ten thousand million neurons-microscopic nerve cells.

Each cell has a slender projection call an axon which links if to other parts of the central nervous system. Some axons stretch the length of the spinal cord making them more than a meter (23.3 ft) long and the longest cells in the body. Each neuron is also linked to neighboring neurons by upto 50,000 connections knows as dendrites.

SPEED PRACTICE

Type the following in double line spacing with a margin of ten degrees:-

A morning walk is the best exercise which can keep all of us fit fresh for the whole day. This is an exercise which is suitable for all sections of society whether young or old. A walk in the morning time refreshes the mind and body and improves the health. Of course, it is a light exercise and highly beneficial for physical and mental fitness. The lungs are provided with fresh air which is very essential for the body. It is for this reason that the doctors always recommend the patients for having morning walk. Many great men like Gandhiji have succeed stressed its importance. Gandhiji himself also used to go out for a morning walk every day without fail.

There is no doubt that it is not very easy for some persons to get up early in the morning, particularly in the winter season. But, for those who have formed and cultivated a regular habit of rising early, a walk in the morning is a must. If they miss it even for one day, they feel very lazy and miss something for the whole of the day later on. Generally in small towns, people go out of for a walk in the fields which are quite near. In certain towns where there are canals, people cn enjoy their walking along their banks. On the other hand, in big cities like Bombay and Calcutta people cannot have the opportunity to go into the fields for a walk every day. They can either have it on the roads in the early morning or they can go to the public parks where they can enjoy fresh air. Thus a morning walk is different in a small town and a big city. But, on the other hand, walking in the morning is a must for all the city dwellers. This is the only time when they can hope to breathe in fresh air.

While walking through the fields in small towns early in the morning. One can Enjoy the beautiful scenery of nature. A cool breeze is blowing at this time and one feels very pleasant. The birds which rise early in the morning are chirping in the business and on the branches of the trees. Some farmers are also ploughing the fields while others are busy reaping the standing crops. In the villages side one can also see the working of the persian wheels for drawing water out of the wells. In the cities where the people generally go to the public parks for a walk, one can see many old men, walking or doing light exercises. We can many also find some persons doing yogic exercises on the green grass.

SPEED PRACTICE

Type the following in double line spacing with a margin of ten degrees:-

Business is part of society. In fact, it exists only at the sufferance of society. No business can exist without its corresponding customer. Therefore, the primary duty of business is to satisfy the desires and aspirations of society. Retailers are part of any business and even the most uneducated among them will realize that in their own interests, they have to safeguard the interests of the consumer. They are primarily engaged in selling goods and services to the ultimate customers or consumers. So, they are of utmost importance in the distribution of consumer goods. Let us briefly analyse what is meant by retailing. It is an important and final act from which it derives social significance. It contributes to the fulfillment of the marketing process in which the various functions of the seller are accomplished. It is final marketing process which is an integral part of the productive process in the sense that it adds value to the goods supplied or services rendered through creation of time, place and possession utilizes.

No doubt, a retailer is an intermediary. Nevertheless in the scheme of things, he is very necessary as he serves a vital purpose as the last link in the distribution channel whose services cannot be ignored or undermined, especially in the fast-moving business world of to-day. Whether a producer of manufacture produces it is the ultimate customer who has to consume it. It is here the retailer plays a vital and important role by creating and also stimulating a demand for the goods manufactured by the producers. He has thus a key role to play in marketing the goods.

It is the job of retailer to be always in touch with the consumer, assess his requirements, find out his choice for particular goods and procure them from the respective manufactures and supply them to him at competitive prices. He is acting as a purchasing agent of the consumer and at the same time the selling agent of the producer. He can best co-ordinate the product development and product consumption. He is called upon to match the requirements and aspiration of the consumer to the ability of the producer to meet those aspirations. It is un uphill task. But, a resourceful retailer will be able to stock a wide range of goods and meet the demands of the consumer from time to time.

SPEED PRACTICE

Type the following in double line spacing with a margin of ten degrees:-

A strong foundation exist in the State both by way of manpower and infrastructure for launching a concentrate effort for accelerated economic growth. Government of India is planning to create a favourable investment climate and the State government propose to take full advantage of this to reap the maximum benefits for the State. Economic growth has also to be balanced with justice in providing avenues for the percolation of these benefits of the common man. One of the major problems in the State is large scale unemployment and the industrial policy of the State has to consider a balanced development not only in high technology sectors or in large scale and medium industries but also in the traditionally high employment oriented areas like handlooms, cottage and village industries and small scale sector, both organized and unorganized. Over contribution to the State and this sector would also require support and strengthening. With these objectives in view certain measures are proposed to be introduced from the current year.

The major incentives provided by the State, in addition to infrastructure support, to large and medium industries have been capital subsides and Interest free sales tax loans. It is proposed to streamline these incentive packages in such a way as to direct their focus to backward areas and also to specific categories of industries which need to be attracted to the State. The power sector has already been provided high priority in our plan programmes and the endeavour of the state would be to overcome the deficit in power by the end of the Seventh Plan. The government are also considering power generation to be taken up through independent corporations in collaboration with private sector, with external aid or commercial credit so that the process of augmenting generation capacity can be speeded up.

The textile policy which has been announced does not provide adequate support of the handloom sector. It is very essential not only to modernize the sector but also to provide suitable incentives and financial inputs in order to increase their marketing competence so that increased output can be sustained and the large employment provided by such output is not affected. Unlike the Central government, the States lack advantage of directly tapping resources like internal assistance or domestic borrowing.

SPEED PRACTICE

Type the following in double line spacing with a margin of ten degrees:-

The Central Government has on July 24, 1991 announced in the Parliament an open and liberalized industrial policy lifting all forms of controls, abolishing MRTP limit and compulsory licensing, allowing direct foreign investment up to 51 per cent equity and fresh look at public sector, barring eight core areas. The 1991 industrial policy tabled in Parliament unshackles the Indian industry from unnecessary administration and legal controls and complements series of measures taken by the new Congress Government in trade policy, exchange rate, and overall macro-economic and fiscal management. In a dramatic move, the Government has abolished industrial licensing for all projects excepting for eighteen industries related to security, strategic and other considerations.

The policy is demanded by the Indian industry sought to amend the MRTP Act to remove the threshold limit of assets of Rupees one hundred crore in MRTP companies and dominant undertakings. The amendment would eliminate the need for prior approval of Central Government for establishment of new undertakings, expansion, merger, amalgamation, take-over and appointment of directors. In a bid of to attract NRI and other foreign investments, the Governments has thrown open thirty four areas including metallurgy, food processing, hotel and tourism industries. Now onwards, approval would be given for direct investment up to fifty one per cent equity in high priority industries. This change in expressed to go a long way in making Indian policy on foreign investment attractive.

The policy stipulates that dividends to be expatriated; by companies with foreign equity will have to be met through export earnings over a period of time. Foreign equity proposals need not necessarily be accompanied by foreign technology agreements.

The policy says that there shall be no bottlenecks of any kind in clearance of proposals for foreign equity participation. The companies with foreign equity up to fifty one per cent will be encouraged to act as trading houses, primarily engaged in export activities. This will generate greater passage of Indian goods to export Markets.

SPEED PRACTICE

Type the following in double line spacing with a margin of ten degrees:-

The proper and timely implementation of plans has great importance in the planning process. It is facilitated, if the necessary individual are taken at the stage of formulation itself. The investments in the plans is devoted to large individual investment projects and development programmes and schemes. There are a number of steps common to both these areas. In addition, for each of the two broad areas, there are specific tasks to be undertaken for ensuring effective implementation. For example, pre investment planning should be carefully undertaken before taking up large individual projects. This involves an analysis of resources potential which should be followed by feasibility studies covering aspects such as cost estimates, profitability and assessment of national economic benefits. The projects could then be selected on the basis of technical and economic criteria.

After the project formulation stage, attention has to be paid to efficiency and economy in the construction of projects. Apart from the use of improved techniques of planning steps must be taken to improve the systems of reporting on progress and short-comings in implementation. There should be a better co-ordination of the efforts of the different agencies engaged in construction work to ensure the completion of the projects according to schedules. During the operation stage also efforts are required for education of costs and improvement of efficiency and productivity. The plan is concerned not only with creation of new production facilities but also with getting maximum results from existing facilities. Application of improved managing systems can go a long way in yielding better results in this regard.

Continuous appraisal of progress is of vital importance for ensuring implementation. Suitable information and reporting systems and will have to be devised so that those responsible for that implementation can anticipate difficult and short comings and take appropriate corrective measures then and there. Efforts should also be taken at this stage to reduce costs and also to ensure optimum utilization of scarce materials at the national level and also avoid their wastage. Each year every large project should undertake forward planning both in physical and financial terms for a further period of five years.

SPEED PRACTICE

Type the following in double line spacing with a margin of ten degrees:-

Discipline is a comprehensive term. It may refer to the mental and moral training of the young. It may also refer to the body of rules, the observance of which is very necessary to attain the objectives of a group. Viewed from the point of view of the individual it consists of a set of rules written or unwritten which must be obeyed. Viewed from the point of authority controlling a group, it is a system y which the mass at the bottom is made to behave in the way wanted by the authority. The average man goes through almost from the cradle to the grave. His life is shaped into a mould by the parents, the school, the religion, elders and superiors. It is exercised in various ways by ethical laws, legal codes and customs.

The foremost value of discipline is, it conditions the raw man and fits him to be a useful member of the society. The various rules and regulations are evolved out of past experience by others and a man going though them is saved all the trouble by following the course appointed for him. The training beings from his childhood and by the time he becomes a mature youth he has gone through a safe road. It is not something impossible for a man to observe, and often carries the grace of appreciation and even prizes.
Thus for instance, the child observing it is liked by parents and teachers. In fact in any walk of life, the observance of it is enjoined by law, social customs, religion or education or be it just a behaivour of what is expected of him, has a direct value. Such a value may mean marks for the child, a higher rank for the army man, or higher order for the man of religion a promotion for the ma n in an office success for the professional man and definite profit of for the business man.

The subjective value of discipline to the individual is not of less value either. Man is subject to a good many failings. Great man are characterized by their self-control and sense of duty which was all acquired only through a life of it. Hence to be pure and to be strong in heart ultimately the man must be thought a course of discipline. Discipline rules are the result of a number of factors. When a boy joins his school, or a young man nhis regiment, the new recruit is faced with a curriculum a drill to which the he must outwardly conform whether he likes it or not. Only the authority has a clear idea of the meaning and value of the whole set of arrangements.

SPEED PRACTICE

Type the following in double line spacing with a margin of ten degrees:-

The travel and tourism industry is a service industry with employment opportunities in both the public and private sectors and its scope is worldwide rather than provincial. Today, tourism is the worlds fastest growing industry. This industry provides both monetary gains and social benefits. It is probably the rare instance of an industry earning foreign exchange without exporting national wealth. The development and promoting of tourism in all its aspects is a highly competitive field and also an extremely challenging pursuit.

Tourists can be a capricious lot, so their demands are ever changing and they are always on the lookout for something new, different and unique. Tourism is a field where there is no ultimate strategy or foolproof formula for excellence. You must by young, full of enthusiasm, like people, love your country, have interest and experience of traveling be proud of your heritage and should like people from your own country and abroad to discover and understand the fascinating aspects of India. You should have the ability to handle people, organize them, deal with them and communicate with them. Once you are sure that you would like to make a career for yourself in this industry, you should be aware of the areas of productive employment, the organization in this sector and the courses or subjects which would qualify you for a job in this fast growing industry.

The work opportunities in the Department of Tourism at the Union and State levels range wide with openings for those with just basic degrees as also for those who have professional qualification. The Tourism Department and Directorates at the state and union level have the responsibility of promoting and publicizing travel and tourism within the country, especially the tourism spots in that state, for the domestic tourists who wish to discover their own country. There are openings for information Assistants at the office counters of the Tourism department where you have to supply answer to queries of tourists, help them to plan their itinerary in India. You could also be at the Welcome to India desk of the Government of India Tourist Information Offices at the international and domestic airports.

Here your job would be to greet tourists on arrival and help them sort out their arrangements, solve there problems, guide them on where to go, how to reach there, what to do and so on.

SPEED PRACTICE

Type the following in double line spacing with a margin of ten degrees:-

Leprosy occupies a special position among communicable diseases because of the long duration of the disease, the frequency of disabilities and the social and economic consequences it engenders. From an economic point of view, leprosy's primarily a disease of the nerves. Although the modem medical technology has succeeded in changing the disease coursed of leprosy patient, he is still not assured of freedom from deformity and disability. The physical deformity in leprosy which is permanent and often progressive, results in both reduced employment opportunities for the patients and economic loss to the family. The consequences of these are much more pronounced due to the added effects of social stigma attached to the disease . Leprosy is considered to be the major cause of blindness in the South East Asia Region.

Through the increasingly widespread distribution of Multidurg Therapy land its effectiveness, the prevalence of leprosy, as measured by numbers of registered cases has been reduced from 5.4 million cases in 1994 the reduction in prevalence of registered casers to one per ten thousand people in each endemic country by the year 2000 AD The largest total number of untreated registered cases are to be found in India and Brazil.

There is always a gap between the number of registered cases and the estimated actual number of cases. This number of undetected cases is believed to be the highest in India and Bangladesh. Of all the diseases known to India, leprosy has the longest history and greatest number of victims who are deprived of human dignity and love. The exact number of victims living in the country is unknown. According to world health organization statistics, India accounts for nearly 50% of the total number of leprosy cases in the world. While this is so in India, the State of Tamil Nadu is known for the highest endemicity. Numbers alone do not adequately describe the problems posed by the disease Millions of leprosy patients in India are living in sorrowful conditions and are struggling through out their lives against deformities, disfigurement and disabilities. The deformed leprosy patients are living an isolated miserable life.

They are hated because of their physical ugly appearance. In India, a great majority of leprosy patients arte living in remote villages where the chances success to appropriate medical care in leprosy are limited. Though majority of the patients and their relatives are aware of the availability of appropriate medical care. They are not prepared to utilize it because of the social stigma.

SPEED PRACTICE

Type the following in double line spacing with a margin of ten degrees:-

For if we are to control our own and one another's actions as we are learning to control nature, the scientific point of view must come out of the laboratory and be applied to the events of daily life. It is foolish to think that the outlook which has already revolutionized industry, agriculture, war and medicine will prove useless when applied to the family, the nation or the human race. Unfortunately, the growing realization of this fact is opening the door to innumerable false prophets who are advertising their own pet theories in sociology as scientific

Science is continually telling us through their mouths that we are doomed unless we give up smocking, adopt or abolish birth control and so forth. Now it is not my object to support any scientific theory, but merely the scientific standpoint. What are the characteristics of that standpoint? In the first place, it attempts to be truthful and therefore impartial. And it carries impartiality a great deal further than does the legal point of view. A good scientist will be impartial between Mr. Smith a tapeworm and the solar system. He will leave behind him his natural revulsion of the tapeworm, which would lead him to throw it away instead of studying it as carefully as a statue or a symphony and his awe for the solar system, which led his predecessors either to worship its constituents or at least to regard them as inscrutable servants of the Almighty, to exalted for human comprehension.

Such an attitude leads the scientist to a curious mixture of pride and humility. The solar system turns out to be a group of bodies rather small in comparison with many of their neighbors and executing the movements according to simple and easily intelligible laws.

After the project formulation stage, attention has to be paid to efficiency and economy in the construction of projects. Apart from the use of improved techniques of planning steps must be taken to improve the systems of reporting on progress and short-comings in implementation. There should be a better co-ordination of the efforts of the different agencies engaged in construction work to ensure the completion of the projects according to schedules. During the operation stage also efforts are required for education of costs and improvement of efficiency and productivity. The plan is concerned not only with creation of new production facilities but also with getting maximum results from existing

PART : B

SHORT NOTES ON SUBJECT TOPICS

1. **STATISTICAL MATTER:** A Tabular Statement giving particulars of certain things or achievement, the particulars generally occupying the first column and the figures occurring the other columns

2. **(a) INLAND INVOICE:** A document giving full details of the price, quality, size and quantity of goods sold within a country.

   (b) DEBIT NOTE: A Debit note is a statement sent by the seller to the buyer when and undercharge is rectified or when goods sold have not been noted in the invoice.

   (c) CREDIT NOTE: A Credit note is a statement sent by the buyer when a portion of the goods is returned by the buyer as damaged, etc., or when an overcharge is corrected.

   (d) ACCOUNT SALES: A statement rendered by an agent to his principal after effecting the sales showing the amount realized and the net amount after deducting the commission and the expenses connected with the sale

3. **(a) APPLICATION:** A requisition by a person seeking a job or asking for a benefit such as scholarship, permit, etc.,

   (b) BUSINESS LETTER: A letter from a firm or a company to its customer or to another business house.

   (c) PROFESSIONAL LETTER: A letter written by a professional like Engineer, Doctor, Lawyer, etc. and in some cases, a businessman.

   (d) OFFICIAL LETTER: (One authority to Another authority): A letter from a Government or quasi-Government office to another Government or quasi-Government Office or firm or to an individual.

4. **GOVERNMENT ORDER:** An Order issued by the Government under the powers delegated by the Governor

PART - B

ABBREVIATIONS

A/C	:	Account	B.P.	:	Bills Payable
Authd.	:	Authorised	B.R.	:	Bills Receivable
Addns.	:	Additions	Bal. fr.d	:	Balance from
Accd.	:	Accrued	Br. Govt.	:	British Government
Acctt.	:	Accountant	B/f.	:	Brought forward
Amt.	:	Amount	B/d.	:	Brought down
Addl.	:	Additional	Bk. of Eng.	:	Bank of England
Annl	:	Annual	Bindg.	:	Binding
Accrdg.	:	According	Bus.	:	Business
At F.D.	:	At Fixed Deposit	C.A.	:	Chief Accountant
Advt.	:	Advertisement		:	Chartered Accountant
App. A/C	:	Appropriation Account	Cap.	:	Capital
			Curr.	:	Current
Accdg.	:	According	Commn.	:	Commission
Addl.	:	Additional	Chartd.	:	Chartered
Adjt.	:	Adjustment	Constn.	:	Construction
A.G.	:	Accountant General	Cum.	:	Cummulative
Allce.	:	Allowance	C/f.	:	Carried forward
Agst.	:	Against	C/d.	:	Carried down
A.O.	:	Accounts Officer	Cash at C.A.	:	Cash at Current Account
Appln.	:	Application			
Assn.	:	Association	CashatS.B.A/c	:	Cash at Savings Bank Account
Asst.	:	Assistant			
Attn.	:	Attention	C.S.	:	ChiefSuperintendent Chief Secretary
Bd.	:	Board			
Bk.	:	Book, Bank, Block	C/o.	:	Carried over
B/s.	:	Balance Sheet	C.C. Bk.	:	Co-operative Central Bank
Bal. or Bce.	:	Balance			
Bldgs.	:	Buildings	Contgcy.	:	Contingency
Depn.	:	Depreciation	Ind. Bk.	:	Indian Bank
Dis.	:	Discount	Ins.	:	Insurance
Dev.	:	Development	Instn.	:	Institution
Dedn.	:	Deduction	Ind.	:	India or Indian
Deb.	:	Debenture	Int. Div.	:	Interim Dividend
Div.		Divident	Infm.		Information

ABBREVIATIONS

Dr.	:	Debtor or Director	Liby.	:	Library
Dn.	:	Division of Down	Lia. or Liaby.	:	Liability
Disconcn.	:	Disconnection	Mg. of Mang.	:	Managing
Decen.	:	Decision	Misc.	:	Miscellaneous
Dept.	:	Department	Maintce.	:	Maintenance
Dy.	:	Deputy	MD.	:	Managing Director
D/s.	:	Dear Sir (s)	N.P.	:	Net Profit
Expr.	:	Expenditure	N.L.	:	Net Loss
Endts.	:	Endorsements	Natl. Sav.	:	National Savings
Engr.	:	Engineer	Nom. Cap.	:	Nominal Capital
Edl.	:	Educational	Notfn.	:	Notification
E.g.	:	Example	O.D.	:	Overdraft
Estd.	:	Established	Obtng.	:	Obtaining
Expln.	:	Explanation	Obsvn.	:	Observation
Exps.	:	Expenses	Orgn.	:	Organisation
Excdg.	:	Exceeding	Objn.	:	Objection
.Eqty.	:	Equity	P & L.	:	Profit and Loss
Fd. Dep.	:	Fixed Deposit	Prtng.	:	Pringint
F/fly	:	Faithfully	Premm.	:	Premium
Follg.	:	Following	Provdnt. Fd.	:	Provident Fund
G.P.	:	Gross Profit	P.F.	:	Provident Fund
G.L.	:	Gross Loss	Provns.	:	Provisions
Gl.	:	General	Pendg.	:	Pending
Govt.	:	Government	Prely.	:	Preliminary
Govr.	:	Governor	Possn.	:	Possession
H.O.	:	Head Office	P.O.	:	Postal Order
H.M.	:	Head Master	P.T.O.	:	Please Turn Over
H.Q.	:	Head Quarters	Publn.	:	Publication
H.R.A.	:	HouseRentAllowences	Ptn.	:	Printing
Qln.	:	Qualification	Subscrbd.	:	Subscribed
Qtn.	:	Quotation	Socy.	:	Society
Qty.	:	Quantity	Sectt.	:	Secretariat
Qn.	:	Question	Suggn.	:	Suggestion
Regr.	:	Registrar; Register	Supt. /Supdt.	:	Superintendent
Res.	:	Reserve	Subsdry.	:	Subsidiary
Regd.	:	Registered	Transfd.	:	Transferred

ABBREVIATIONS

Reqd.	Required	Tradg.	Trading
Red.X	Red Cross	T/w	Typewriter
Remn.	Remuneration	Tech.	Technical
Regn.	Registration	Tempy.	Temporary
Rly.	Railway	U.C.	Upper case
Stt.	Statement	Unexpd.	Unexpected
S.Crs.	Sundry Creditors	Underwrtg.	Underwriting
S.Drs.	Sundry Debtors	w.e.f.	with effect from
Sty.	Stationary	w.r.t	with reference to
Subscripn.	Subscription	W.k.	Week / Work
Spl/ spe	Special	W.h.	Which
Secy.	Secretary		

PROOF CORRECTION SYMBOLS

UC	Upper Case	Run on ⇄	Proceed without break
Lc	Lower Case		
Cap.	Capital	#	Leave space
Caps.	Capitals	⌢	Joint together
All Caps.	All Capitals		
N.P.	Next Para New Paras	⅄	Interest
F.P.	Fresh Para		
P.// [	Parts	Rom. fig	Roman Figure (ii)
o	Circle	In wrds(Words)	In Figures (2)
Oces.	Circumstances	Letter or word	In Words (Five)
Ote.	Circulate	Underlined	Use capital as
Trs. (Trans)	Transpose	Twice Italics	the case may be.
	(Change)		
stet	Let it stand	Single	All Capitals with underline
∂	Delete	Quotation	Foot (5’)
	(Omit it)		apostrophe (Ram’s)
<u>M</u>adurai	Initial capital		Omission of a letter (I’ll)
∴	Therefore	Double	Inch (5’6”)
∵	Because	Quotation	Ditto (”)
/	The		

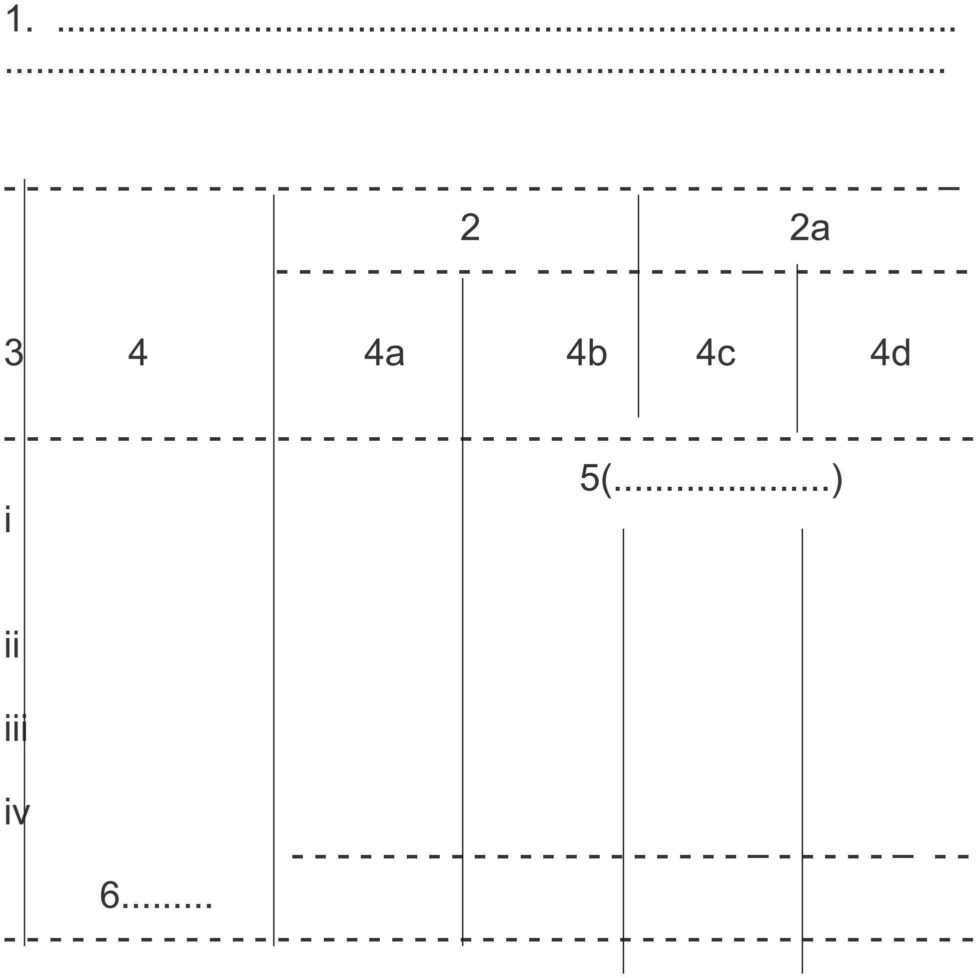
PUNCTURATION FOR FIGURES:

9,34,53,050.90 - Ordinary
93,453,050,90 - Millions , (Population, Tonnes)
9,345,30,50.90 - Hundreds
9,345,30,50.90 - Thousands
9,34,530,50.90 - Lakhs

PROOF CORRECTION METHODS

Method of directing correction (Symbols and/or abbreviations)		Explanation / Expansion	Solution
Rama⋏s	⋏	Apostrophe	Rama's
XII	Arab	Arabic numerals	12
india	Cap	Capital Letter	India
India	Caps	Capital Letters	INDIA
Indian Economy	All caps	All Cap. Letters	INDIAN ECONOMY
in the ⋏ leaf	⋏ book	Caret Mark	in the book leaf
in most	⁀	Close up	inmost
fulfil		Delete	fulfil
St⋏	/⊙	Fullstop	St. (Saint)
As I go⋏	/,	Comma	As I go,
I saw⋏	/;	Semicolon	I saw;
Co⋏operative	⋏ -	Hyphen	Co-operative
Purchase LESS Returns		Indent	Purchase LESS Returns
twenty five	In figs.	In figures	25
23	In wds.	In words	twentythree
my Alma Matter	Ital.	Italic Letters	my Alma Matter
In asmuch/as	#	Leave Space	inasmuch as
one man	‿	Less Space	One man
in the market	Stet	Let it stand	in the market
Book	l.c	Lower Case	book
The book was sent by post. // It was fine to read. // ⊏ ¶	P. N.P. F.P	Paragraph Next Paragraph Fresh Paragraph	The book was sent by post. It was fine to read.
The book was sent by Post. It was fine to read.	Run on	No Paragraph	The book was sent by post. It was fine to read.
⋏Navy⋏	" "	Quotation	"Navy"
22	Rom.	Roman numerals	XXII or xxii
Seperate	Sp.	Spelling	separate
5 / 2	Trs.	Transpose	2 5
52	Trs.	Transpose	25
book the in (3 2 1)	Trs.	Transpose in order	in the book
india	u.c., U.C	Upper Case	India
I wish ★ go to @ City ★ to @ Mumbai		Search, find & insert * Astcrisk @ Symbol for 'at'	I wish to go to Mumbai City

1.STATEMENTS
(A) LAY-OUT



1. Title of the Statement (Head lines)
2. & 2a. Heads of the Details
3. Serial Number
4. Head of the Particulars
4a,4b, 4c & 4d - Sub-Headings (Particulars)
5 Rupees in ....(if any)
6. The word ‘Total’

(B). MODEL STATEMENT

STATE-WIDE DISTRIBUTION OF FINANCIAL ASSISTANCE SANCTIONED AND DISBURSED BY THE INDUSTRIAL DEVELOPMENT BANK OF INDIA

S. N.	State	1968 - 69		1969 -70	
		Amount Sanctioned	Amount disbursed	Amount Sanctioned	Amount disbursed
		(Rupees in crores)			
1.	Andra Pradesh	154.40	159.90	1,773.70	1,637.20
2.	Assam*	...	...	12.40	24.40
3.	Bihar	159.90	266.60	965.20	441.70
4.	Gujarat	328.80	301.80	3,724.60	3,148.90
5.	Haryana	58.10	53.60	262.10	249.80
6.	Kerala	133.00	68.30	440.00	342.30
7.	Madhya Pradesh	171.30	143.70	543.00	517.90
8.	Maharashtra	2,217.70	1,100.10	9,621.20	8,812.90
9.	Mysore	489.70	263.60	1,052.70	859.70
10.	Orissa	348.60	46.20	504.10	223.40
11.	Tamil Nadu and Pondicherry	118.50	114.50	1,111.70	1,134.90
	Total	4,180.00	2,518.30	20,001.70	17,393.10

* Particulars in respect of 1968 - 68 are not available.

Type the following Statements and rule up:-

The Beggars Population during the year 2002-2003. ∠1 ∠5

Year	Thirunelveli	Madurai	Ooty	salem
2001-02	15,686	6,750	956	7,208
2002-03	8,725	16,233	1,507	7806 ∠5
2003-04	9,510	18,647	2,317	9,428
2004-2005	10,175	20,010	6,218	10,680 ∠3
Ø 2005-~~2006~~	10,948	21,230	4,185	11316

Type the following Statement and rule up–

Statewise Mineral Production In India // caps.

Name of States	Value of Productions ∅		
	1985	1986	1987
	(In lakhs of rupees)		
Bihar	9030.01	89,90.60	91,90.91
trs. Gujarat	103.60	980.84	5313.40 trs
lo Tamil Nadu	978.24	2210.07	9215.75
trs Orissa	3186.40	1090.45	456.07
West Bengal	1410.04	2720.60	6759.04

Type the following Statement and rule up:-

AREA UNDER PRINCIPAL PRODUCTION OF CROPS

L.C CROPS	Area		Production	
	Hectares	Areas	Metric Tons	Tons
← Paddy	2,271	5,612	3,184	74
Gingelly	2,147	370	47	45
Cotton	404	987	359	84
Ground-nut	817	2,014	952	937
Sugarcane	59	135	387	381
Millet and other cereals	152	5,612	3,134	376

M/L

Type the following Statement and rule up:-

FIGURES RELATING TO PRODUCTION OF HANDLOOM CLOTH

Sl. No.	Variety of cloth	For the year of			
		2001	2002	2003	Total
(1)	(2)	(3)	(4)	(5)	(6)
		(In '000' metres)			
1	Sarees	10,645	8,495	8,438	27,578
2.	Lungies	8,743	6,997	6,132	21,863
3.	Towels	7,423	5,778	6,833	20,034
4.	Dhoties	7706	8,125	7,588	23,419
5.	Bed-spreads	12,543	14,370	11,886	39,159

Type the following Statement and rule up:-

Caps // Trees planted under / "one family, one trees" Compaign.

Taluk	Coconut	Mango	Plan-tain	Other trees
Karur	45,314	20,625	1,25,000	5,412
Trichy81	23,918	8,518	22,000	52,435
Lalgudi	36,520	12,502	13,5~~2~~6	24,830
stet Musiri	~~32,433~~	76,289	44,101	45,022
u.c. thuraiyur	30,008	50,025	25,900	52,098

Type the following Statement and rule up

Types of wood obtained from // caps.
forest

	Year	Sandal wood Trees	Fire wood	Others
	1997-98	680	4,61,740	112
\5	1998-99	1,~~0~~20	7,62,413	1,400
Trs	1999-2000	10,728	9,10,267	11,368
	2000-2001	560	1,00,000	3,000
stet	2001-2002	1,678	~~75,400~~	2,300

Type the following Statement and rule up:-

STATEMENT SHOWING PARTICULARS ABOUT IMPORTS

Name of /Commodity	For the Period		
	2000-01	2001-02	2002-03
Machinery	3,675	3,456	1,346
Tolls	2,567	2,300	1,002
Steel	3,000	2,467	1,266
Paints	1,800	1,500	1,001
Others	2,765	2,398	1,200
Total	13,807	12,121	5,815

2. INVOICE
a (LAY-OUT)

INVOICE

1…………………
2. ………………

3………………… **5…………………**
4……………………
6……………………

……………………

7……………………
8……………………

9……………………
……………………
……………………

- -

10 11 12 13

- -

………………………… **………………………………**
……………………
………………………………
……………………

…………………

- - - - - - - - - - - - -

14 - - - - - - - - - - - - -

15……………………………

- -

16…………

17………………………

18…………………

1. **Name of the Company in Capitals**
2. **Nature of the Company.**
3. **Telephone Number**
4. **Telegrams**
5. **Post Box Number**
6. **Address of the Company.**
7. **Invoice Number**
8. **Date of Invoice**
9. **To Address**
10. **Quality**
11. **Particulars**
12. **Rate**
13. **Amount**
14. **The word 'Total**
15. **Total amount in words**
16. **E. & O.E. (Errors and Omissions Exempted).**
17. **For 'Name of Company' in Capitals**
18. **Designation of the Authority.**

INVOICE – (b) MODEL

INVOICE

//

MODERN ELECTRICALS LIMITED

//

(Dealers in Electrical goods)

Telephone: 53146 — Post Box No. 61,
Telegrams: 'Modern' — 4 West Mahsi Street,

//

No. 384/74 — 23rd May 1975.

//

Messrs. Pari Anand and Sons,
Building Contractors,
Thiruppathur

//

Quantity	Particulars	Rate	Amount
		Rs. P	Rs. P
10 dozens	Switches	25 00	250 00
6	Ceiling Fans	300 00	1,800 00

			2,050 00
	LESS Discount at 10%		205 00

			1,845 00
	ADD packing charges		35 00

	Total		1,880 00

	(Rupees one thousand eight hundred And eighty only)		

//

E.& O.E. — for MODERN ELECTRICAL LIMITED,

////

Sales Manager

Type the following <u>INVOICE</u> and rule up:-

INVOICE

Suresh and company // caps.

(Automobiles)

Telephone : 2810285
Telegrams : "Suresh"

P.B.No: 370.,
20, Patel St.,
Bombay - 400 025

No. 33/2001

5th Jan. 2001.

M/s. Rajan & Sons,
No. 35, Bazaar St.,
Coimbatore - 641 007.

Qty	Particulars	Rate Rs. P	Amount Rs. P.
20 Nos.	Star Cups	20 00	400 00
5 Nos	Foot Rests	15 00	75 00
1 No.	Crown with Disc.	400 00	400 00
			875 00
	ADD: Packing and Transport charges.		25 00
	Total		850 00
	(Rupees eight hundred and fifty only)		

E. & O. E

for Suresh and company // Caps

Type the following INVOICE and rule up:-

INVOICE

National Trading Co. Pvt. Ltd., // caps

(General Merchants)

Telephone: 52134

P.B.NO.65,
3 Nethaji St.,
Karur - 624 031

No. 190/2000

3rd March 2000.

The Warden,
Indira Hotel,
Perambalur - 621 212

Qty	Particulars	Rate Rs. P	Amount Rs. P.
10	Gingelly oil Tins of 10 kgs. each	950 00	9,500 00
~~5~~ 5	Coconut oil Tins of 5 kgs each	500 00	2,500 00
			12,000 00
U.C	LESS discount 6%		720 00
			11,280 00
	ADD Transport charges		1~~5~~0 00 ✗6
			11,120 00
	(Rupees eleven thousand and one hundred and twenty only)		

E. & O. E

for National Trading Co. Pvt. Ltd. // Caps.

Manager UC

Type the following Invoice and rule up:-

INVOICE

Ramu Stationery Mart //caps

(Dealers in fancy goods) UC

Telegrams : 'Mart'
Telephone : 2491811

Post Box No. 786,
49, Gandhi Road,
Erode - 638 001

No. 109/2004.

2nd May 2004.

M/s. Seetha & Co.,
50, Ganesh St.,
Tirupur - 638 001

Quantity	Particulars	Rate	Amount
		Rs. P.	Rs. P.
50	Writing Pads	20 00	1,000 00
100	Fancy Paper Weights	7.00	700 00
			1,700 00
	LESS : Discount @ 10%		~~100~~. 00 / 85
			1,615 00
	ADD : Packing & Transport charges		55 00
	Total		1,670 00
	(Rupees one thousand six hundred and seventy only)		

E. & O.E

for Ramu Stationery Mart/caps

Manager

Type the following INVOICE and rule up:-

INVOICE

KAMALRAJ STORES

(General Merchants)

Telephone : 2248135
Telegrams : "KAMAL"

Post Box No. 23,
80, Suresh Street,
Madurai - 625 014

No. 230/2002.

4th May 2002.

M/s. Kalyani Trade,
50, Sivan Koil St.,
Pondicherry - 605 001.

Qty	Particulars	Rate	Amount
		Rs. P	Rs. P.
100 Nos.	40 Pages Note Book	00 15	15.00
1 Doz.	'Pilot' Pen	200 00	200 00
5 Doz.	'Iris' Black Ink	6 00	30 00
1 Doz.	'Kores' Correcting Fluid	48 00	48.00
			293 00
	Sales Tax		8.80
	Total		301 80
	(Rupees Three hundred and one and eighty only)		

E. & O. E

for Kamalraj Stores /Caps

Manager

Type the following Invoice and rule up:-

INVOICE

Santhosam Nadar and Sons ← caps

(Rice Dealers)

Telephone : 2658115
Telegrams : "Nadar"

Post Box No. 53,
6, Natesan Road,
Chennai - 600 053

No. 250/2003

7th July 2003.

M/S. Perumal & Bros.,
105, Kamarajapuram,
North Arcot Dist.,
Vellore - 632 003.

Qty.	Particulars	Rate	Amount
		Rs. P	Rs. P.
30 bags	Nellore Kitchadi	200 00	6,000 00
5 "	" Ponni	300 00	1 500 00
			7,500 00
	LESS: Discount @ 5%		375 00
			7,125 00
	ADD : Packing Charges.		275 00
	Total		7,400 00
L.C	(Rupees Seven thousand and four hundred only)		

E. & O E

for Santhosam Nadar & Sons ← caps

Manager.

2.(ii) CREDIT NOTE- MODEL

CREDIT NOTE

Telephone: 45016
Telegrams: 'Saroja'

Post Box No. 184
35 Purasai High Road,
Madras 600 007.

No.29/71

22 nd January 1971.

Messrs. Soori & Company,
21 Car Street,
Kancheepuram 631 501.

Cr.by SAROJINI TEXTILES

Details of Invoice	Particulars	Amount
		Rs. P.
Invoice No.110 18 th January 1971	By 50 Petty Coats at Rs. 16/- each returned not being the size ordered	800 00
Invoice No. 102 19 th January 1971.	By 5 pairs of silk dhotis at Rs. 400/- each pair returned being damaged	2,000 00
		2,800 00
	(Rupees two thousand and eight hundred only)	

for SAROJINI TEXTILES,

Accountant.

Type the following CREDIT NOTE and rule up:-

CREDIT NOTE

Telephone: 8556842
Telegrams: "Ramu"

Post Box No. 187
80 Kamarajapuram,
Chennai - 600 035

No. 360/2002

2nd June 2002.

M/s. Rajendran & Co.,
15, Church Gate,
Bombay - 400 058.

Cr. by THE FASHION HOUSE

Details of Invoice	Particulars	Amount Rs. P.
21st May 2002 Inv. No. 84	By 100 Nos. two yards Dhoties (handloom) at Rs. 15/- not having bn. ordered	1,500 00
-do-	By. 50 Nos. Napkins at Rs. 2/- not having bn. ordered.	100 00
	Total	1,600 00
	(Rupees one thousand and six hundred only)	

for THE FASHION HOUSE,

Head clerk.

Type the following Credit Note and rule up:-

CREDIT NOTE

Telephone : 2432612
Telegrams : "James"

Post Box No. 876,
6 Babu Street,
Chennai - 600 003.

No. 56/99

4th Jan. 1999.

M/s. Sagar Hotels,
Main Road,
Chennai - 600016.

Cr. by James Tour Links. // caps.

Details of Invoice	Particular	Amount Rs. P.
Invoice No. 817 5th Dec. 1994	By Fare for 20 Tourists @ Rs. 250 per person, since sight seeing was cancelled	5,000 00
	Total	5,000 00
	(Rupees five thousand only)	

for JAMES TOUR LINKS.,

Manager

Type the following <u>CREDIT NOTE</u> and rule up.

CREDIT NOTE

Telephone : 8276095
Telegrams : "COOL"

Post Box No. 453,
10. Valmiki Nagar,
Chennai - 600 053

No. 300/99

3rd Sep. 1999.

M/s. Star Electricals,
10, Katpadi St.,
Vellore 632 001.

Cr. by COOL FANS.

Details of Invoice	Particulars	Amount Rs. P.
Invoice No. 987 20th Aug. 1999	By Price difference between three & four bladed fans	825 00
Invoice No. 1015 28th Aug. 1999	By Off-Season discount omitted	175 00 UC
	Total	1,000 00
	(Rupees one thousand only)	

for COOL FANS,

Manager

Type the following <u>CREDIT NOTE</u> and rule up:-

CREDIT NOTE

Telephone : 18~~3~~272
Telegrams : " PARI "

Post Box no. 931,
15, Annie Besant Rd.,
Calicut - 673 002

No. 57/2000

21st Nov. 2000.

Messrs. Venu & Bros.,
6, Santhoshpuram,
Visakhapatnam - 530 016.

Cr. by. PARI AND SONS

Details of Invoice	Particulars	Amount
		Rs. P.
Invoice no. 57 10th Nov. 2000	By 90 Leather Belts at Rs. 50 each	4,500 00
Invoice no 57 ~~1~~ 12th Nov. 2000	50 Leather small Belts at ~~20~~/- each	1,000 00
20/-	Total	5,500 00
	(Rupees five thousand and five hundred only)	

for PARI AND SONS,

Accountant

Type the following Credit Note and rule up:-

CREDIT NOTE

Telephone: 2842568
Telegrams: "FACIT"

Post Box No. 3684,
35 Mount Road,
Chennai - 600 002.

10th Feb. 2000.

Arun Tech. Instt.,
39, Salai Street,
Tirunelveli - 627 006.

Cr. by FACIT INDIA Ltd.,

Details of Invoice	Particulars	Amount
		Rs. P.
20th Feb 2000 Invoice No. 85	By 2 Nos. Facit T/Ws (Eng) at Rs. 6000/- not having bn. ordered	12,000 00
20th Feb. 2000 Inv. No. 85	By 2 nos. Ribbon Roll at Rs. 80	160 00
	Total	12,160 00
	(Rupees twelve thousand one hundred and sixty only)	

for FACIT INDIA LIMITED

Reginal Manager

2.(iii) DEBIT NOTE- MODEL

DEBIT NOTE

Telephone: 443456
Telegrams: 'Nathan'

Post Box No.9
5 Jones Road,
Madras 600 015.

No.10/72

31 st March 1972.

Messrs. Ramalingam & Sons,
Station Road,
Madras 600 033.

Dr. to SWAMINATHAN & SONS

Details of Invoice	Particulars	Amount
		Rs. P.
Invoice No.3 25 th March 1972	To 20 meters of Raymond tweed at Rs.37/-per meter mentioned in the invoice, which should be Rs. 43/- per meter	120 00
Invoice No.8 28 th March 1972	To a piece of long cloth charged at Rs.40/- which should be Rs.50/-	10 00
	Total	130 00
	(Rupees one hundred and thirty only)	

for SWAMINATHAN & SONS,

Chief Accountant.

DEBIT NOTE

Telephone : 2465395
Telegrams : "KUMAR"

Post Box No. 539,
50 Big Bazaar,
Chennai.

No. 160/2000.

3rd June 2000.

M/s. Sastha & Co.,
10 Sannadi St.,
Thirubuvanam 612101.

Dr. to KUMAR AND SONS

Details of Invoice	Particulars	Amount Rs. P.
(25th May 2000) Inv. No. 70	To 10 ~~Maces~~ Marcs 'Shivaji Brand Jari' at Rs. 290/- Wh. Shd. be Rs. 295/-	50 00
	Total	50 00
	(Rupees fifty only)	

for Kumar & Sons, //caps

DEBIT NOTE

Telephone : 2426650
Telegrams : "PARI"

P.B. No. 68.,
35 N.S. Bose Rd.,
Chennai - 600 001.

No- 115/2000

Ist June 2000.

M/s. Hari & Co.,
55, Krishnan Koil St.,
Krishnagiri.

Dr. to PARI AND COMPANY

Details of Invoice	Particulars	Amount
		Rs. p.
Invoice No. 70 28th Mar. 2000.	To 6 saries of Garden sarees @ Rs. 300/- each Wh. Shd. be Rs. 250/-	300 00 ~~30 00~~
Inv. No. 75 30th Mar. 2000 x5	To 10 saries of cotton saries @ Rs. 290/- each Wh. Shd. be Rs. 260/-	100 00
	Total	400 00
	(Rupees four hundred only)	

for PARI AND CO.,

Proprietor

DEBIT NOTE

Telephone: 3232323
Telegrams: "SANKAR"

P.B.No. 305,
25, Clive St.,
Bombay 400 002.

No. 250/15

2nd April 2000.

M/s. Raju & Co.,
312, Silver St.,
Calcutta - 700 001.

Dr. to SANKAR AND COMPANY

Details of Invoice	Particulars	Amount Rs. P.
Inv. No. 100 5th Mar. 2000	To 20 pens charged @ Rs 10/= each wh. shd. be Rs.15/=. each	100 00
Inv. No. 101 8th Mar. 2000	To 30 Ribbon rolls (Black) small boxes at Rs 55/= each wh. shd. be Rs. 60/=	150 00
	Total	250 00
	(Rupees ------ ------ in words)	

for SANKAR AND CO.,

Accountant

DEBIT NOTE

Telephone : 28451550
Telegrams : "oriental"

P.B. No. 730,
85, Big St.,
Triplicane,
Chennai - 600 005.

No. 90/2001.

1st Mar. 2001.

M/s. Balu & Co.,
10, Vellalar St.,
Kumbakonam 612001.

Dr. to Oriental Traders //capr.

Details of Invoice	Particulars	Amount Rs. P.
Invoice No. 115 5th Feb. 2001.	To 10 nos. of children cycles at Rs. 300/- Wh. shd. be Rs. 350/-	500 00.
Invoice No. 117 7th Feb. 2001.	To 10 nos. of cycle tubes @ Rs. 250/- Wh. shd. be Rs 275/-	250 00
	Total	750 00
	(Rupees seven thousand and fifty only)	

for ORIENTAL TRADERS,

Partner.

Type the following DEBIT NOTE and rule up:-

DEBIT NOTE

Telephone : 2345805
Telegrams : "BHIM"

Post Box No. 871,
160 Karur Rd.,
Namakkal - 636301.

No. 20/99

7th Mar. 1999.

M/s. Rajan Carriers,
29 Station Rd.,
Salem 636 001.

Dr. to BHIM BODIES

Details of Invoice	Particulars	Amount
		Rs. P.
Inv. No. 30 20th Feb. 2000	To Second coat painting done to lorry, omitted	3,900 00
Inv. No. 38 25th Feb. 2000	To Cost of luggage rack fitted to luxury coach, omitted	1,100 00
	Total	5,000 00
	(Rupees five thousand only)	

for BHIM BODIES,

Accountant

2. (Iv) ACCOUNT SALES-MODEL

Telephone: 82067
Telegrams: 'Madan'

Post Box No. 519.
209 Anna Saiai,
Madras 600 002.

12 th February 1991.

ACCOUNT SALES

Account Sales of 50 eater Filters sold on account and at the risk of Messrs. Rub y and Company Limited, Mayiladuthurai.

Number	Particulars	Amount	
		Rs. P.	Rs. P.
315	50 Water Filters at Rs.80/- each		4,000 00
	LESS Charges		
	Transport	100 00	
	Insurance	300 00	
	Commission at 5%	200 00	
		--------	600 00
	Balance as per Draft enclosed		3,400 00
	(Rupees three thousand and four hundred only)		

E. & O. E.

for MKADAN MOHAN TRADERS,

Manager.

Telephone : 22571050
Telegrams: "Easan"

Post Box No. 674,
50 Second Line,
Chennai - 600 042.

Ist July 2004.

ACCOUNT SALES

A/c Sales of 1 No. of Power and Distribution Transformer at ~~Rs. 20000~~ ∅ / risk of the Manager, Ramu Electric Company, Mannargudi.

Number	Particulars	Amount Rs. P.	Amount Rs. P.
500	One No. Power and Distribution Transformer at Rs. 15,000/- each		15,000 00
	LESS Charges		
	Storage	100 00	
	Cartage	200 00	
	Insurance	300 00	
	Commn. @ 5%	750 00	1,350 00
	(Bal. as per Draft enclosed)		13,650 00
	(Rupees thirteen thousand and six hundred and fifty only)		

E. & O. E

For EASAN AND COMPANY,

Managing Director.

Telephone : 2658497
Telegrams : "Engineers"

Post Box No. 6328,
208, Lenin Nagar,
Ambattur,
Chennai.

20th May 2003

<u>Account Sales</u> Caps.

A/c Sales of two Generating sets sold on a/c and @ / risk of M/s Sakthi and company, Nagpur.

Number	Particulars	Amount Rs. P	Amount Rs. P
300.	2 Generating Sets at Rs 10,000/- each		20,000 00
	LESS Charges		
	Cartage	200 00	
	Storage	300 00	
	Insurance	500 00	
	Commn. @ 5%.	1,000 00	2,000 00
			18,000 00
	Bal. as per draft enclosed (Rupees eighteen thousand only)		

E. & O. E

for Engineering Traders/ Caps

Sales Manager

Telephone : 2444062
Telegrams : 'Timber'

P.B. No. 35,
118-C Mount Rd.,
Chennai - 600 006.

ACCOUNT SALES

Account sales of 100 Nos. Teak wood Reapers sold a/c on account and at the risk of M/S. Hari & company, Pudukottai.

Number	Particulars	Amount Rs. P.	Rs. P.
850	100 Nos. of Teak Wood Reapers at Rs. 50 each		5,000 00
	LESS Charges		
	Packing	80 00	
	Transport	220 00	
	Insurance	100 00	
	Commission @ 5%	250 00	650 00
			4,350 00
	Balance as per draft enclosed		
	(Rupees in words)		

E. & O.E.

for MURUGAN TIMBER DEPOT,

Working Partner

Telephone: 2668170
Telegrams: "Ram"

30, Nelson Road,
Chennai - 600 002.

15th Sep. 2004.

Account Sales caps.

A/C Sales of 15 Godrej Washing Machine sold and at the risk of M/S. Fashion and co., Bombay.

Number	Particulars	Rs. P.	Rs. P.
800 ø	16 15 Godrej Washing machine at Rs. 5000/- each.		75,000 00
	LESS Charges.		
	Cartage	100 00	
	storage	150 00	
	Comm. at 5%	3,750 00	4,000 00
			71,000
	Balance as per Draft enclosed. (Rupees Seventy one Thousand only)		

E. & O. E

for RAM AND Co.,

Sales Manager.

Telephone: 209450
Telegrams: "Ravi"

Post Box No. 2381
3 Syed St.,
Bombay 400 006

7th December 1999

ACCOUNT SALES

A/c Sales of 50 cycles sold on a/c and at the risk of M/s. Rajesh & Co., Karur.

Number	Particulars	Amount Rs. P.	Amount Rs. P.
60	50 cycles at Rs 1000/- each		50,000 00
	LESS Charges		
	Storage	500 00	
	Insurance	300 00	
	Commission @ 5%	250 00	1,050 00
			48,950 00
	Bal. as per Draft enclosed (Rupees forty eight thousand nine hundred and fifty only)		

E. & O. E

for RAVIKUMARAN & SONS,

Manager.

3. LETTERS (A) APPLICATION - LAY OUT

APPLICATION

1. ……………

2………………
………………
………………..

3 ……………
4………………
………………
………………
5. ……………
6………………………………..
7……………………………….

8………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………
9……………………………
10………………………
11……………………..
12……………………..

1. **The word ‘From’**
2. **The ‘from address’**
3. **The word ‘To’**
4. **The ‘To address’**
5. **salutation**
6. **Subject:**
7. **Reference**
8. **Body of the Application**
9. **Complementary Close**
10. **Enclosures if any**
11. **Place and**
12. **Date**

(B) APPLICATION- MODEL

From
//
Regena Rani, B.Sc., (I.T) M.C.A.,
201. N.G.O.A. COLONY,
Sankarankoil,
Tirunelveli District. 627 756.
//
To
//
The Managing Director,
R.P.Software Pvt. Ltd.,
Bangalore.56
//
Sir,
//
Sub: Application for the Post of Manager - for your esteemed Concern.
//
Ref: Your Advertisement in Daily Journal dated 25th January 2009.
//

//
I came to know from the advertisement in the daily journal dated 20th March 2009 that there is ka vacancy for the post of Manager in your esteemed concern. I beg to submit myself as a candidate for the same.
//
I am twenty two years old with a good physique. As for my qualification I like to state that I have passed the B.Sc., Information Technology and M.C.A., With70% of marks. I have also passed the typewriting English and Tamil Senior Grade with first class. If I have a chance to work under your esteemed concern I assure that I will discharge my duties to the entire satisfaction of the superiors.

I am also enclosing herewith my Dio-Data for your kind perusal and favourable orders.
//
Thanking you,

Yours faithfully,
////

Sankarankoil,
30th January 2009

(REGENA RANI)

Type the following Application in a Proper form:-

From

K. Kanimozhi,
18, Appar Street,
Madurantakam.

To

The Principal,
New College,
cap MADRAS – 14.

Sir,

I have passed the Hr. Sec. Exam with distinction. I wish to study B.Sc., Degree course in your college. I request (to send) you me the appl. form and Prospects for the B.Sc., Degree course. I have also ~~enclosed~~ a postal order for Rs. 100 and a stamped self-addressed envelope.

uh   Stet

Thanking you,

Yours faithfully,

MADURANTAKAM   (K. ______)

4.12.2009.

Type the following Application in a proper form:

From

J. Trinita, M.B.B.S., D.C. Psyco.,
Amos Cottage,
2, 3rd St., Venkatraman Nagar
Vellore - 6 632006

To

The Medical Superintendent,
Christian Medical College & Hospital,
Vellore - 632001

Sir,

Sub: Application for the Post of Doctor - Reg -

Ref: Your Advertisement in the Notice Board - & Daily paper dated 26-06-2003, 11.09.2003

- - - -

W.r.t / above cited, I come to know that is there a vacancy for / Post of Medical Asst. in Ur. esteemed Hospital and I sumbit my appln. for the same.

I am an old student of C.M.C., and finished my P.G (Specilised in Child Psychology) at London.

Herewith, I am enclosing my Bio-Date for your kind consideration and expecting favourable orders.

Thanking you, Yrs. ffly

Vellore - 6 (J. TRINITA)

~~11-09-2003~~

Type the following Application in the Proper form:-

From :-

R. Yamini, B.Com
23, Gandhi St,
Vellore - 18

To :-

The Manager,
Kannan & Comp.,
Medicine Stockist and Agents.,
Chennai - 23

Sir,

I wish to apply for / post of Regional Sales Manager f. wh. you ha. advertised in "The Hindu" dated 5th March 2004

I ha. passed / B.Sc B.Com Exam. of / Madras taking commerce as my main sub. in. 2003

I ha. worked as a senior sales Supervisor in M/s. Raghavan & Co, Trichy leading Marketing & Distribution agents for a period of 4 yrs. As they ha. shifted their business to Mumbai, I could not continue in their service. // I may assure you th. with / knowledge I ha. so far acquired I shall be able to discharge my (in commercial marketing) duties to yr. satisfaction

Vellore
5th March 2004.

Yours faithfully,

Type the following APPLICATION in proper form.

From

V. Baskaran,
S/o K. Vinayagam
B-24, Tamil Nadu H. Board,
Palani

To

Dr. T. S. Ramani,
Gl. Secretary,
Indian Home Medical Assn,
T. N. Branch,
Madurai - 625 001.

Sir,

Sub:- Application for the post of clerk.

Having come to know that / Indial Homes Assn's Medical Tamil trs. Nadu Branch office requirings a clerk. I hereby apply for / same.

Besides having a degree in Economics. I have passed shet Govt. Technical Edn. in Tamil and English T/w Higher Grade. trs.

I request to. I may be selected for appointment in yr. office.

Y. f.

Palani
12-8-2002.

Type the following application in proper form:-

From

D. Kumara Raja, M.A.,
38 Rajaji St.,
Erode - 1.

To

91 The Prncipal,
(College, Arts) Drn.

Sir,

u.c sub: Application for / post of
L Tamil Lecturer in ~~English~~ in your
college.

w.r.t. your advt. in the 'Thinamani'
u.c dated 18th june 2004, I apply for / post
w.e. of lecturer in Tamil in your college. // I
he. passed / M.A., (Litt.) Examn. of
Annamalai University in I class in the yr.
1L 2002. I have worked as Tutor for
one h ~~two~~ year in a private College and as
Lecturer in a priv. College for three
months.

I have aged 28 years w. good
l.c physique. I play foot ball and was captain
of the college team. // I expect a
salary of Rs. 4000/- p.m. I will attend
an interview at my cost.

enclosedh Copies of testimonials are ~~encld.~~

Yours faithfully,

Erode,

25th June 2004.

Type the following Application in proper form.

From Glory Febia, 77, St. Urusula St., ~~Madras~~ Chennai - 600018 to / Principal A.I.M. Hr. (School.) Sec) Chennai - 600006 dt / 23.05.2009.

Sir, Sub: Appl. submitted for / post of Physical ~~Edn.~~ Instructor

W.r.t yr. advt. in the hindu dt. / 9.5.2009, I my offer services for the post of Physical ~~Edn~~. Instructor in yr. esteemed school.

I have passed B.Com., degree Exam. fr. / University of Madras and have undergone / Phy!. Instr's. Trang. Course at the Y.M.C.A. College of Physical Edn. Chennai. I hav. duly obtd. the requisite ~~C~~ Certificate from the College. (two yrs. in the Dharam Singh High School, Mambalam) // I have worked as Physical Instructor temporarily for a period of ^

I enclose herewith copies of testimonials and certificates. I am aged ~~36~~ 26 yrs. w. good health. I request U to kindly consider my application favourably.

Yrs f/ly,

Chennai - 18,
~~as on date~~ 23.05.2009
Encl: Copies of testimonials and Certificates.

(B). BUSINESS LETTER - LAY OUT

BUSINESS LETTER

1……………………………
2…………………………….

3……………………… 5…………………………….
4………………………. 6……………………………
…………………………….
7………………………. 8……………………………

9……………………….
…………………………

10……………………….

11…………………………………………………………………………………….
………………………………………………………………………………………………

12………………………
13…………………….

14(…………….)
15……………….

1. Name of the Company in Capitals.
2. Nature of the Company within brackets.
3. Telephone Number on the left side.
4. Telegrams
5. Post Box Number on the right side
6. Address of the Company.
7. Reference Number
8. Date
9. To address
10. Salutation
11. Body of the Business Letter
12. Complimentary Close
13. for NAME OF THE COMPANY in Capitals.
14. Name of the Authority in capitals within brackets.
15. Designation of the Authority.

3.(b) BUSINESS LETTER-MODEL

BUSINESS LETTER

DEVANATHAN AND COMPANY

(Fruit Merchants)

Telephone: 34511
Telegrams: 'Devan'

Post Box No.20
29 Bazaar Road,
Cuddalore 607 001.

Ref. No.5/409

15th June 1983.

Messrs. Abdul Samad and Company,
Fruit Mart,
Madras 600 001.

Dear Sirs,

We are in receipt of your order No. 30, dated 10th June 1983 for the supply of 100 jack fruits on or before the 10th of next month.

While we thank you for your kind order, we very much regret our inability to comply with your order as we are already committed to the supply of a similar bulk order about the same time to another party.

However we can pass on your order, if you so desire us to do, to our sister concern here who will be able to supply you jack fruits of the best quality.

We assure you of our prompt action at all times.

Yours faithfully,
for DEVANATHAN AND COMPANY,

(T.DEVANATHAN)
Partner.

Type the following BUSINESS LETTER in proper:-

SUBRAMANIYAN & COMPANY LØ
(General Merchants)

Telephone : 7856110
Telegrams : "SUBRAMANI"

P.B. No. 3216
55. V.M. Colony St.,
Calcutta - 700 001.

Ref. No. 276/99.

19th Dec. 1999.

M/s. Vivek & Co.,
15, Kandapillai St.,
Nagappatinam - 611 001.

D/S.,

Your lr. ḷ dated 11.12.1999 on hand and noted its contents. We are sorry for / delay in despatching your goods. This was due to some labour trouble in our Company. We hope th. you wl. excuse this delay since you are now aware of the reason.

Your order already booked, wl. be despatched to you today and hope th. they would reach you on Friday.

Assuring you to be at your service at all times!

Thanking you,

Yours faithfully,
for SUBRAMANIAN & COMPANY,

(M. SENTHIL)
Manager.

Type the following BUSINESS LETTER in proper form:

RAMESH TEXTILE LIMITED
(Dealers in Textiles)

Telephone: 27984
Telegrams: Goods

Post Box No. 36,
65, Bharati Rd.,
Coimbatore 641010

Ref. No. 5/2004

2nd Nov. 2004

Thiru S. Rajan,
20, Patel Road,
Pune - 411 004

D/S,

We have for acknowledgement your letter dated 30th Oct. 2004 with 3 share Transfer forms and 4 scrips for 400 shares for effecting necessary transfer.

On sending of / documents we find that / necy. shares Transfer stamps to / value of Rs. 5/- have not bn. affixed to / transfer deed. Kindly arrange to send those stamps. On receipt of the same, arrangements will be made to have the transfer duly effected as desired by you.

We assure you to our best and ~~kind~~ / prompt services at all times.

Yours faithfully,
for Ramesh Textiles Limited // caps

S. GANESH
Authorised Signatory.

Type the following BUSINESS LETTER in proper:-

RAGU AND COMPANY
(Dealers in House Utilities)

Telephone : 310157
Telegrams : "RAGU"

P. B. No. 37,
20, Kumaran St., LS
Tiruppur - 638 601

Ref. No. 10/470

22nd June 1999.

Messrs. Balu Enterprises, LS
5, Car Street,
Erode - 638 001

D/S.
We are in receipt of yr. lr. of yesterday and have pleasure in enclosing a copy our latest catalogue giving full particulars of / various classes of goods in wh. we deal. We wish to draw yr. kind attn. to page 14 of the catalogue wh. furnishes / details ∅ you are interested in.

Thanking you,

yours faithfully,
for RAGU AND COMPANY,

M.D. Krishnamoorthy caps
← Manager.

Type the following BUSINESS LETTER in proper :-

BATA INDIA LIMITED
(Leading Footwear Dealers)

Telephone : 6242110
Telegrams : "BATA"

Post Box No. 64,
48, Nethaji Rd.,
Perambalore 626212 ~~61~~

Ref. 10/430

21st April ~~1998~~ 2000

M/S. Mohammed Ali & Sons,
25, Vivekananda Main Road,
Kolathur,
Chennai - 600 099.

Dear sirs,

We regret to state that the shoes and chappals despatched by you on 15th April 2000 in execution of our order No. 38/98 arrived here in a most unsatisfactory condn. The consignment showed obvious signs of pillerage. Also, your invoices showed a total of 770 pairs, but only 465 have bn. recd. We shall therefore be glad if you confirm whether the invoiced figure was correct. If not, pl. arrange to send / remaining pairs as early as possible.

We expect your early reply.

Y/f.,
for BATA INDIA LIMITED,

← ‖ (M. SANKAR)
MANAGER LC

JOTHI GENERAL STORES
(Dealears in piece-goods)

Telephone: 2728
Telegram: "Jotti"

P. B. NO. 300
17 Race course Rd.,
Coimbatore 641027

Ref. No. 6/2003

20th June 2003

M/s Roy Brothers,
28, Nehru Road,
Madras 600001.

D/sirs,

we have received yr. lr. asking for settlement of a/c. we are really sorry that [The bulk of the goods] are have not been able to make Payment now.

is still in our hands while the Season has come to nearby active
Perhaps we mis calculated the demand for the good and ordered more than the ought to have done. we are very much concerned at the prospect of holding the goods till the next winter. // 2. In the //N.P. circumstances stated above, we shall be thankful if you will kindly take back apart of the stock and credit the amt. future order.

Yrs. ffly,
Caps. for Jothi general stores,

(J. VASAN)
Manager.

Type the following BUSINESS LETTER in Proper:

DURGA CEMENTS LIMITED
(Dealers in High class cement)

Telephone: 4150135
Telegrams: 'DURGA'

P.B.No. 451,
22, Bagat singh Marg,
Ludhiana - 141001.

Ref. No. 4/820

20th Feb. 2001.

M/s. Gayathri Engg. work,
30, Barrala Marg,
Amristar - 143 004.

D/s

we are pleased to know th. you Propose to start a branch of yr. reputed firm in "NEW DELHI" shortly.

we are glad to introduce ourselves (of) as one leading manufacturers of quality cement f. constn. of houses, factories and workshops in / northern region f. well over 20 years.

we enclose details of the cement th. we Produce, its cost, terms of Payment, etc. we assure you of / quality of cement and very Prompt delivery.

we solicit your early orders.

Yours ffly.,
for DURGA cements Limited // caps

(V. Arul)
Manager.
Encl.: Details of cements.

3.(d) PROFESSIONAL LETTER - LAYOUT

1…………….. **3……………………….**
2…………….. **4……………………….**
……………………….

5 ………………………..

6…………………….
……………………….
……………………….

7……………………..

8…………………………………………………………………
………………………………………………………………………………….
…………………………………………………………………………………...

9……………………..

10(……………………)

1. **Name of the Sender in Capitals.**
2. **Designation of the Sender**
3. **Telephone Number on the right side**
4. **Address of the Sender**
5. **Date**
6. **To Address**
7. **Salutation**
8. **Body of the Professional letter.**
9. **Complementary Close.**
10. **Name of the sender in capitals within brackets.**

PROFESSIONAL LETTER - MODEL

V.GANAPATHY, M.A.,
Social Worker.

Telephone: 336
14 Anna Salai,
Nagapattinam.
//
27 th January 1964.

The Collector of Tanjore,
Tanjore.
//
Sir,
//
I am deeply touched by your appeal for funds for relief of flood victims in Bihar. I have collected a large number of blankets and also a sum of Rs. 10,001/-(Rupees ten thousand and one only). Kindly let me know to which officer the blankets should be sent.
//
The amount collected is being sent to you by a crossed cheque. Please acknowledge the receipt.

Awaiting your further instructions.
//

Yours faithfully,
////
(V.GANAPATHY)

A. Dikshaya, M.com, C.A.,
Chartered Accountant.

L 609
4, Bharathi Rd.
Thanjavur L 001.

~~Dated the~~ 2
15th sep. 2004

Thiru R.B. Suriya,
Ji 25, Gandhi L Road
Mayiladu thurai. 609 001.

Dear sirs,

Received your letter dated 7th instant.

In the list enclosed there with, you have furnished (your) only the particulars of ✓ income during this year.

ch while assessing the income for i.c. income tax the Act permits to deduct fr. the total income expenses some to certain extent. For example, l.c amt. deposited in an Approved Fixed l.c Deposit. Premiums paid for Life Insurance wl. be included in this claim. Besides these ⊗ amounts deposited towards the National savings scheme dur. the yr. l.c. 2004.

If you have (not) taken steps for the items mentioned above, do may you trs. them within the end of this month.

※ there is possibility for deducting in a large measure the

Y. ffly.

(A. DIKSHAYA)

A. Padmini, M.A.B.L. U.C.
Advocate.

Telephone: 323001
6, Andal Nagar,
Kumbakonam 612001

5th Aug. 2001

Kk Thiru. S. Pragasam
10 west St.
Kumbakonam. 612 001.

Sir,
you have mentioned in your lr. dated the 22nd July 2001. that you are in a difficult situation now that it is not possible for repay to you with in a month's time the amt. of Rs. 30,000/- (Rupees Thirty Thousand only) borrowed from my client Thiru. Babu.

I wish to remaind you that you had Promnised at the time of taking loan from him, to repay the amount within three months more than a year had elapsed after that. So I would like to request you to repay. the amount within two months from this date, failing which my client will be compelled to proceed against you legally.

Y.f.

(A. PADMINI)

PROFESSIONAL LETTER

N.M. Glory, M.A.B.L.,
Advocate

Telephone: 245326
18, New Colony,
Mylapore,
Chennai. 600 004

15th May 2000

Thiru. K. Anbu,
20, Main Road,
Nungambakkam,
Chennai.

Sir,

Thank you for yr. kind letter cited, you have stated in your letter th. there are some Practical difficulties in repaying the entire amount of Rs. 15,500/- (Rupees .... in. words) at once. I do admit your difficulties.

I request th. you may the loan amount of Rs. 15,500/- (------) within six months; Rs. 7,000/- within ten days and the balance in five equal monthly instalments.

Thanking you.

Yours faithfully,

(N.M. Glory) caps.

Type the following PROFESSIONL LETTER in proper method:-

Dr. M.S. Raman, M.D., u.c Telephone : 286576
Physician & Surgeon. 72 Car Street,
Madurai - 1.

19th Oct. 2003.] ⟶ |

To
The Manager,
1L Kalaimagal Textiles Ltd.,
Madurai - 2.

Sir,

Thiru. N. Sathasivam, Foreman in yr.
lc factory Came to my clinic on the 16th Nov.
2003L ~~1999~~ w. your letter. I am examd. him
+L thoroughly and am ~~of~~ the opinion th. he
has to undergo treatment (a)(for) month and
l.c requires Complete rest for two months. i u.c
may say confidently that he is not suffering
serious any from illness and to his normal
work in the factory, after a period ~~of four~~ three L
months. I do recommend him medical leave u.c
u.c for three months. // my bill for consultation #
and treatment wl. be ~~forwarded~~ (you)(to) in
due course for settlement as usual.

Yours faithfully,

(M.S. RAMAN)

The following PROFESSIONAL LETTER in proper form.

All Caps

Dr. P. Somasundaram, Ph.D.
Bio - Technologist.

Telephone No 2443452
53 Kuppiah St.
West Mambalam
Chennai 600 033
3rd Aug. 1999.

The Secretary to Govt.,
Agri. Department,
Government of Tamil Nadu,
Chennai 600 009

Sir,

I am a retd. Prof. of Bio-Technology. I was previously the Head of Bio-Technology Dept. in of Anna University, Chennai. I had written many research papers published in many National and international journals.

(yield) I wish to inform you that I have developed a new technique for getting yield from different varieties of coconut trees within a very short period. The quantity and quality of yield are also found to be higher. // I request you to visit my modern farm on a convenient day. this you[1] may[2] adopt[3] in your schemes[4] after due consideration. // N.P

Y. f.

(P. SOMASUNDARAM)

PROFESSIONAL LETTER.

A. PARTHIBHAN, M.E,
Contractor.

Telephone : 6264125
242, Ganga colony, Avc.
Anna Nagar (West)
Chennai. 600 101.

2nd June 2003.

Thiru C. Gopalan,
20, Mariyamman koil st,
Pallavaram,
Chennai. 600 043.

D/s.,

In accordance w./agreement dated / 2nd Jan. 2003, executed by us, I have taken up / work of construction of yr. house at Pallavaram. You wl. appreciate tt. I have bn. prompt in executing / work to yr. satisfaction.

When the work is in progress, you have stopped further payment. This is quite against / terms of the agreement. My Payment for requested repeated have hs proves to be in vain.

If you fail to ⊗ payment there will be no alternative for me except to stop / work and claim damages provided f. in the agreement without any further correspondence with you.

⊗ pay the

yours ffy.,

(A. PARTHIBHAN)

3.(d). OFFICIAL LETTER –LAY OUT
(ONE AUTHORITY TO ANOTHER)

1………………………….

2……………………….. | 3………………………..
……………………………. | ………………………..
……………………………. | ………………………..

- -

4………………………………………….

5…………

6………………………….

7………………………….

- - - - -

8…………………………………………………………………………………….
……………………………………………………………………………………….
……………………………………………………………………………………….
……………………………………

9………………………….

10………………………….

1. **Name of the Office**
2. **'From' Name & Address of the Authority (Sender) on the Left side.**
3. **'To' Address of the authority (Receiver) on the Right side.**
4. **Letter Number and date.**
5. **Salutation**
6. **Subject**
7. **Reference.**
8. **Body of the Official Letter.**
9. **Complementary Close.**
10. **Designation of the Official.**

MODEL

OFFICIAL LETTER
(One authority to another authority)

CHINGLEPUT MUNICIPALITY
///

From		
//	)(	To
	)(	
Thiru. R.Dhanasekarn, M.A.,	)(	Dr. K.Madhavan, M.Sc.,(Agri) Ph.D.
Commissioner,	)(	5, Adams Road,
Chingleput Municipality,	)(	Chingleput- 603 001.,
Chingleput 603 003	)(	
	)(	

- -

//

Letter No.344/02-6, M.E.P., Dated the 11th September 2002

//

Sir,

//

Sub: Malaria Programme - Destruction of wild growth around municipal area.

//

Ref: (1) From the Director of Public Health, letter No. 554/M 02-6, dated the 06th August 2002

//

(2) Your letter dated the 09th August 2002

//

With reference to your letter second cited, I am to state that the Director of public Health hask suggested that wild growth of plants breeding mosquitoes may be destroyed.

//

2. Insturctions have been issued to the Malaria Eradication party not to disturb the herb arrowroot. However, instructions have been issued to spray insecticides over the plant to protect the plant and to present the possibility of breeding.

//

Yours faithfully,
////
Commissioner.

iumba-konam caps

Kumbakonam Municipality

From
Thiru M. Vasan, M.A.,
Commissioner,
Kumbakanam munici-
pality,
Kumbakonam 612001.

To
The managing Director,
Cholan Roadways
Corporation,
Kumbakonams
612001.

4 Letter no. 3210/A/90, dt. the 12th Dec. /90. 19

Sir,

Sub: mahamagam festivals - Bus Stand-
Tempfrarily shifting of - Reg.

Ref: Your letter no. 12130/Rc/01/90,
dt. 19th Dec. 1990

I acknowledge receipt of your letter about flying of special buses from various buses from various places (x) during the Mahamagam festival ~~time~~ time

2. In this connection, I ~~am~~ to inform you that, as was done last occasion during the ~~year~~, arrangements have been ~~made~~ to operate, made all the bus services ~~from~~ the vacant near grounds the entry points ~~of~~ the town. The arrangement will be effect ~~of~~ about ten days from 20th Feb. 1991 to ensure smooth flow to traffic.

Yours ffly.,

Commissioner.

(x) to Kumbakonam

Type the following 'Official letter' in proper form:-

caps. // Office of the Chief Engineer (Irrigation)

From	To
Thiru. S. Venkatesan, B.E., Chief Engineer (Irrigation), chennai ~~Madras~~ - 600 00~~8~~. 5	The Secy. to Govt., P. W. D., F. S. G. Chennai - 600 009.

Lr. No. S4/47307/84-5, dt. / 4th Sep. 1984.

Sir,

Sub: Irrgn. Research - upgrading of [Research] [Irrigation] Station, Poondi - Proposals - regarding.

Ref: This Dept's. lr. No. P3/47307/84-5, dated the 10th Mar. 1984.

- - - - -

2. In the context (the) (of) Celebration of the Silver Jubilee of the Irrigation Research Station, ~~Red Hills~~ poondi, my proposals assumes special importance.

above 3. Early orders on my ~~about~~ proposals are, ∴, solicited.

sh 1. I am to draw attention of Govt. to my proposal contained in / refe. cited for ~~upgrading~~ stet. the irrigation Research Stn., u.c poondi into an Institute of Hydraulics and Hydrology.

Yours faithfully,

Chf. Engr. (Irrigation)

Type the following official letter in proper ;

KANCHEEPURAM MUNICIPALITY

From	To
Thiruh S. Sundari, M.A. Commissioner, Kancheepuram Munpty., Kancheepuram.	Thirumathy. A. Vidya, 9 Karuneegar St., Chinna Kancheepuram.

Rc. No. 322/Buldgs/90, dated / 1st June 1990.

Sir,

Ref: your Building Plan application No. 444 dated / 10th April 1990.

Sub: Buldg. Plan – approval – reg. u.c.

- - - -

w.r. to yr. Building plan application cited, to state that I am the Dir. of Town Planing, kpm. has stated th! The site you have purchased for constrn. of a house in reserved for putting up a Govt. Hospital and ∴ permission will not be granted to construct the building proposed (you) by

2. In The O.S, I am returning yr. buildg. plan application along with its enclosures. so I am already returning herewith the u.c village map and other enclosures such as copy of documents etc. (by you) sent.

yours faithfully sincerely

Commr.

r/ Corporation of Madras caps

From	To
Thiru N. Ramaswami, B.A.,	The Editor,
Public Relations Officer,	"The Hindu"
Corporation of Madras,	Madras 600002.
Madras 600 003	

8 Letter no. 1151/PC/91, dt. the 4th Feb – 1991.

Sir,

Sub: Civic problems – Attending to – Regarding.

Ref: Letter of Thiru C.S. Rao which appeared in the issue dated 4th Jany. 1991 of your daily.

directed/ I am to inform you that both points raised in the Concerned Circle officer and his report has been obtained.

his/ 2. In ~~the~~ report, the Circle Officer has ~~been~~ stated that the road work at Kuppam beach has been included in works list of to be undertaken ~~during~~ during 1991-92.

also/ He ~~has~~ ~~moreover~~ states that the defects at in the street lights in the area since have been rectified

Yours fbly.,

Public Relations Officer

Director of School Education // caps.

From	To
Selvi. Ilakkiya, M.Sc. B.Ed., Director of School Edn., 6 Chennai. 600 006	The Secy. to Govt. Edn. Dept., Chennai. 600 009

Lr. Rc. No. 130/Audit-4/82, dt. 24th oct. 1982.

Sir,

Sub: Edn. Dept. – Audit objections pending for over seven months – clearance – reg.

Ref: Govt. memo. No. 224/G-H5/82-4 Edn., dated 23rd July 1982.

----

w.r.t. the Govt. memorandum cited, I have to state th. / departmental concerned officers have already been addressed in this matter and their replies are still awaited. They have also been specially in this regard reminded.

trs. · l.c.

I shall submit my further report to government receipt on of the reply from them.

Yours faithfully,

Dir. of schl. Edn.

4. GOVERNMENT ORDER- LAY-OUT

GOVERNMENT ORDER

1………………………………………

2………………

3……………………………………………………………………………….
………………………………………………………….

- -

4…………………………….

5……………… **6……………………**

7…………………...

8…………………………………………….
……………………………………………….
- - - - - - -

9………………

10………………………………………………………………………………………
…………………………………………………………………………………………………
……………………………………………………………………………….
………………………………………………………………………………………………

11(……………………….)

12………………….

13…………………..

14………………………….
…………………………….

15……………………….

16……………….

17……………….

1. **Name of the Government**
2. **The word 'Abstract'**
3. **Content of the Abstract**
4. **Name of the Department**
5. **G.O.Ms. Number**
6. **Date of the Government Order**
7. **The word 'Read the following'**
8. **The Content (G.O. Ms. No. Department and date) of 'Read the following'.**
9. **ORDER**
10. **Body of the Order**
11. **'By order of the Governor' within the bracket.**
12. **Name of the 'Secretary to Government' in Capitals**
13. **The word 'Secretary to government'**
14. **The word 'To' and To Address**
15. **'Copy to……….'**
16. **Forwarded By order**
17. **Section Officer.**

MODEL

GOVERNMENT ORDER

GOVERNMENT OF TAMIL NADU

//

Abstract

//

Indian Medicine - Code of Medical Ethics - Addition to warning notice - Approved.

- -

//

Health and Family Planning Department

//

G.O.Ms. No.1190 Dated the 15th May 1974

//

Read the following:

//

G.O. Ms. No. 5622, Health, dated the 29th July 1973.

//

ORDER:

//

The Government direct that the following additions be made to Part III - warning notice of the code of Medical Ethics approved in G.O. Read above:

//

(i) There is no objection to advertisements of the firm of manufacture or of their reputed medicinal preparations.

//

(ii) The photographs of the firms may be advertised bay not the photographs of patients or clients or the Registered Medical practitioners.

//

(By order of the Governor)

//

P.G.MURTHI,
Secretary to Government.

//

To
The Director of Indian Medicine,Madras 600 006.

//

Copy to
All Collectors

//

Forwarded / By order

////

Section Officer

GOVERNMENT OF TAMIL NADU
Abstract.

ieoh

Civil Supply – Tanjavur District – Special Staff – Sanctioned.

Revenue Dept.

G.O. Ms. No. 338

Dated the 15th Oct. 2001
Read the follg:-

G.O. Ms. No. 298, Revenue,
dt. the 25 July 2001.

ORDER:

In the Govt. order cited, six temporary post of Tahsildars were Sanctioned for two months for supervising the procurement of Kuruvai paddy in Tanjavur Dt. Now, Govt. in the

U.C. Food Dept. have decided to ↗ the continue procurement operations further. &

2. Govt. therefore, Sanction the Continuance of the above posts

\# upto the 31st Dec. 2001. or till the necessity ceases which ever is earlier.

(By order of the Governor)

To
The Colln. Tanjavur 620 001

D. PRABHU
Jt. Secy. to Govt.

Forwarded / by order

GOVERNMENT ORDER OF TAMIL NADU &

Abstract.

& 1982

Asian Games 1982 – Holiday for the Govt. offices in certain places – orders – issued.

Public Dept.

G.O. Ms. No. 1008 Dated the 10th Nov. 1982.

Read the following.

From the Director of Sports and Youth Services, Madras letter No. 248/V3/82, dated the 7th October 1982.

ORDER:

The Govt. declare Friday, the 3rd Decr. 1982, as a local holiday for Govt. & offices in Madras City and also Chengalpattu and Coimbatore Districts to enable the Government servants to view on television Asian Games (ins)

4 5 2 3

2. In respect of Coimbatore Dt., the holiday is declared subject to the availability of television transmitter facilities

(By order of the Governor)

K. Diraviam,

Chief Secy. to Govt.

To

All Heads of Depts.

Forwarded / By Order.

S.O.

Govt. of Tamil Nadu All Caps.

Abstract

SCHOOLS – Spl. Grade to Teachers – orders-Issued.

Education Dept.

G.O. Ms./2329/Edn./ Dated the 11th Aug. 2001

Read the following:

G.O. Ms. No. 1950, Finance, dated the 5th July 2001.

ORDER:

It has bn. represented to Govt. that the teachers in schools may be awarded Spl. Grade on completion of twenty years of service in their post. //. 2. The Govt. have carefully examined the above request and direct that Higher Grade teachers and Secondary Grade Teachers in all Schools under all kinds of management be awarded Spl. Grade on completion of twenty years of satisfactory service in the same category.

(By order of / Governor)

C. RAMADAS,
Commissioner & Secy to Govt.

To

The Director of School Education,
Madras 600 006.

: Type the following GOVERNMENT ORDER on proper form.

All Caps / Government of Tamil Nadu.

Abstract

Schools - Hr. Sec. Schools - Science equipment - Purchase of - Sanctioned.

Education Dept.

G.O. Ms. No 1715 Dated / 6th Oct. 1997

Read the follg:

Fr the Director of School Education, Lr No. 4218/H8/97, dated the 20th Jan 1977.

ORDER: -

The Director of School Education has sent proposals for / purchase of Science equipment for the 45 Higher Secondary schools upgraded during 1995 - / at the rate of / 1996 Rs16,000/- per school. // 2. The Government, / n.p after carefully examining / Director's proposals, / order sanction of a sum of Rs 12,00,000/- (Rupees twelve Lakhs only) / Stet for the above purpose

(By order of / Governor)

Run on

M.A. SHANKAR,
Secy to Govt.

To
The Director of School Education
Chennai 600 006.

Forwarded / By order

Section Officer

Type the following DEMI-OFFICIAL LETTER in proper form.

Government of Tamil Nadu /All caps.

Finance Dept.

K ALLAUDIN, I.A.S., Fort. St. George;
Dy. Secy to Govt. Chennai 600 009

D.O. Lr No 45/99-2 dated the 2nd Oct 1981

Dear Thiru Ramanujam

Sub: Meeting - Eleventh Finance Commission - Visit to Chennai - Coverage of.

Ref: From the Secretary, Eleventh finance Commission Lr No 24/EFC/99 dated the 16th Sep, 1988

- - - -

The Eleventh Finance Commn. has planned to visit Chennai in order to ascertain the (*) needs of the Govt. here the meetings of the Commission are scheduled to take place on 1st and 2nd Nov. 1988 in the Secretariat, Chennai. /As the /N.P services of Reporters are reqd. for the coverage of the meetings I am to request you to depute ~~at least~~ three shorthand / steno-reporters from your office for the purpose.

(*) financial

I am also to inform you that the usual honorarium will be paid to the Reporters.

Yours sincerely
(K. ALLAUDIN)

To
Thiru K. Ramanujam, IPS
Supdt. of Police
Special Branch.
Chennai. 600 004

Govt. of Tamil Nadu || Caps.

Abstract.

Education - Aided Schools - payment of House Rent Allowance to Teachers - Orders issued.

Education Department.

G. O Ms. No. 558 Dated the 8th April 2004.

Caps. Order:

The qn. of Sanctioning HRA to the Aided School Teachers has bn. of the under Consideration of the Govt. The Govt. have now decided to allow HRA to them, at the same rates applicable to those working in local body schools. Accordingly, they direct that the Teachers in Aided Schools be paid H.R.A.

2. This order takes effect from 1st April. 2004 and will be in force upto 31st March 2004.

3. This order issues with the concurrence of the Finance Department.

(By order of the Governor)

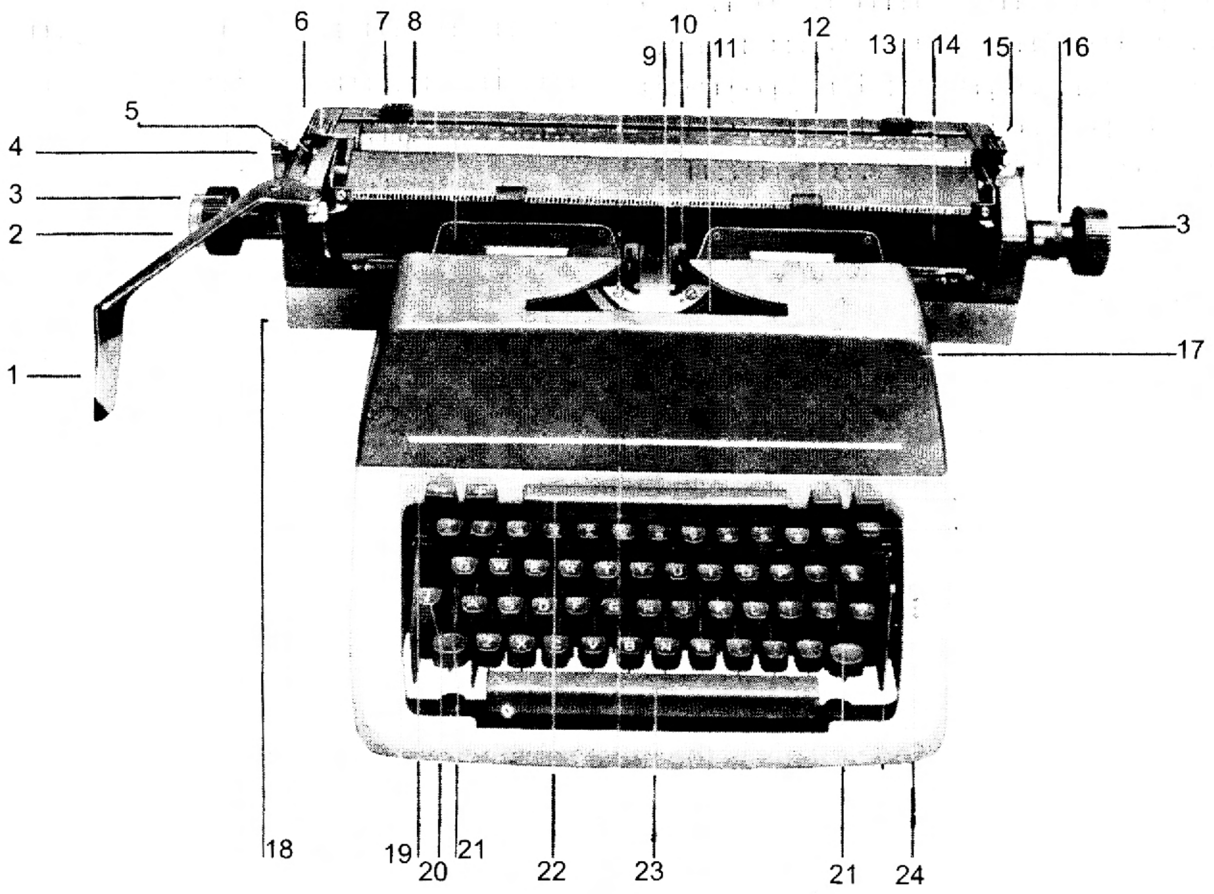
S. SRINIVASAN
Secy to Govt.

To
The Dr. of School Edn. Madras 600 006.
Copy to
Finance Department.
Forwarded/By order
S.O.

PART-C

I. MECHANISM

1. Typewriter and Its Parts



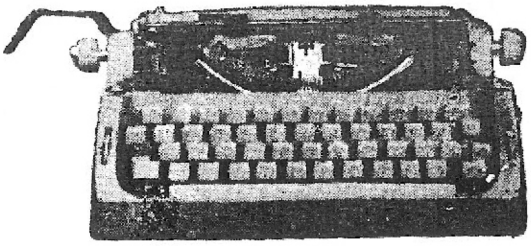
1. Handle / Line Space Lever
2. Plunger Knob
3. Thumb Wheel
4. Cylinder Release Lever
5. Line Space Lever
6. Carriage Release Lever Right
7. Left Hand Margin
8. Margin Scale
9. Type bar guide
10. Ribbon Carrier
11. Segment
12. Paper bail Roller
13. Right hand Margin
14. Cylinder (Platen Roller)
15. Carriage Rclease Roller Left
16. End of the Paper Indicator
17. Cowl Cover
18. Carriage
19. Margin Release Key
20. Shift Lock
21. Shift Key
22. Tabulator Bar
23. Space bar
24. Ribbon Colour Indicator

2. HISTORY OF THE TYPEWRITER :

The first typewriter was invented by Mr. HERRY MILL and was later developed by Sholes, Glidden, Soule and Yost. The first practical typewriter was however, introduced in 1873 and it was brought to India only in 1876.

Letters are type-written on the paper; hence this machine is called as typewriter. The typewriter is most commonly used and best of office machine. Typewriter is a device for writing with neater letters, for doing quicker and better work, for taking more copies and for reading the typed matter easily. There are noiseless, electric and electronic typewriters also.

KINDS OF TYPEWRITERS



There are two kinds of Typewriters:

1. Standard Typewriter
2. Portable Typewriter

Standard Typewriters are most commonly used for office Purpose.
Portable Typewriters are used for camp purpose and it can be easily taken during travel.

ADVANTAGES OF TYPEWRITER

1.Neatness and accuracy .
2.Less strain.
3.Greater speed [less time or time is saved].
4.Economy in stationary.
5.More number of copies can be taken.

IDENTIFICATION OF TYPEWRITER

A Type writer can be identified by its make and serial number.

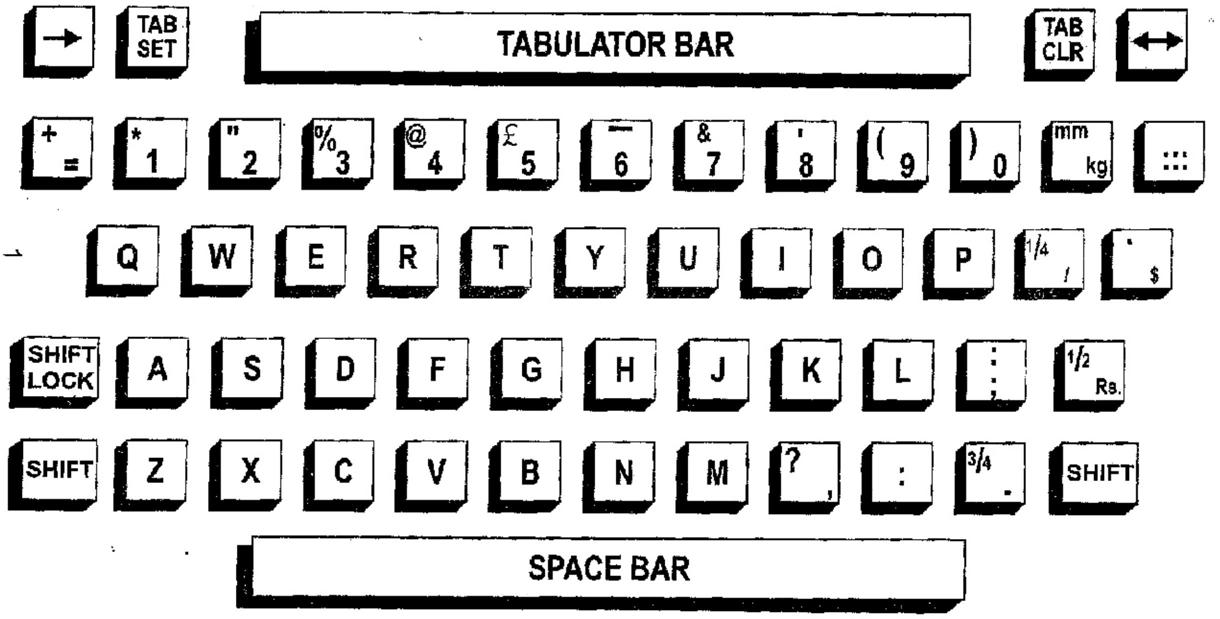
Question:

1.Who invented the typewriter? And when?
2.How many kinds of typewriter are there?
3.What is the advantages of typewriter?
4.How can a typewriter be identified?
5.What is the use of standard model and portable model?

We can divide the typewriter in 3 main parts;

(1) KEY BOARD (2) CARRIAGE (3) MACHINE

3. KEY BOARD



The front portion of the machine where all keys are placed is called the 'key board'.

There are two kinds of key board :(1) Universal standard Key Board and (2) Ideal Key Board.

All the modern typewriters have only the Universal Standard Key Board. Ideal Key Board is not in use now.

The Universal Standard Key Board is not arranged in the alphabetical order or 'abcd' order.

Frequently occurring letters like “e,r,I”, are fixed in the middle of the key board to be operated by strong fingers.

According to the strength of the fingers, the other letters are arranged in the Key Board. So the Keys are not arranged in the alphabetical order.

There are 44 character keys in the Key Board, in all Typewriters. Each Key represents two letters (upper case and lower case characters)

There are 9 non- character Keys are also found in the Key Board. They are as follows :

1.Shift Keys 2.Shift lock 3.Margin Releaser
4.Back spacer 5.Tablulater 6. Ribbon position Indicator
7.Key releaser 8.Space Bar 9. Personal touch Indicator

When we operate the character Key, the carriage moves 1 degree towards left with making an impression.

When we operate non-character Key, the carriage moves 1 degree towards left but not making any impression.

Dead Key is a Key which gives an impression but not making the carriage to move. It is available only in Tamil type writer .

'N' and 'H' are called master Keys. These are used to check up the alignment.

'a' and ';' are called Guide Keys and the two little fingers are called Guide fingers. 'asdf' and ';lkj' are called Home Key.

NON- CHARACTER KEYS AND THEIR USES :

1. SHIFT KEYS: There are two shift keys and one shift lock on the Key Board. Two shift Keys are placed on the both side of the Key Board. Shift Key is used to type the upper case character occasionally but Improper uses of shift key causes Bad Alignment. The two shift keys are for the use of easy manipulation.

2. SHIFT LOCK: The shift lock is used to type the upper case character continuously and also to type headings, Boarders and under score in the display work. The shift lock Key can be released by using the shift Key.

3. MARGINAL RELEASER: This is used for typing beyond the set margins It is used to complete a word on the right side margin. It is also used on the left side for typing marginal notes paragraph numbers and etc.

4. BACK SPACER : when we operate the back spacer ,the carriage moves towards right by one degree by leaving blank space . this is used to fill up omissions and to make correction. To type combination letters etc.

5. TABULATOR: It consist of

(1) Tabulator Bar
(2) Tabulator Set Key
(3) Tabulator Clear Key

There are as many number of tabulator stops in the tabulator rack as there are degrees in the carriage scale.

The tabulator bar is used to bring the carriage to any particular position quickly towards left .
The tabulator bar is used to type tabular are columnar statements, specifications and indent paragraphs.(giving five spaces for paragraphs)

6. RIBBON POSIION INDICATOR : Otherwise called ribbon colour indicator or ribbon switch or bi-chrome device lever, is fixed at the right side of the key board.

The up and down movement of the ribbon is controlled by the ribbon position indicator.

7. KEY RELEASER: It is used for releasing the type bars when 'jam' occurs due to mishandling.

8. SPACE BAR: It is located at the bottom of the key board and operated by the right thumb. If we use the space bar the carriage moves 1 degree towards right without making impression (1 degree blank space). Also It is used for leaving blank space between words.

SHIFT SYSTEMS: There are two kinds of shift system:

(a) Segment Shift System. (b) Carriage Shift System.

QUESTIONS:

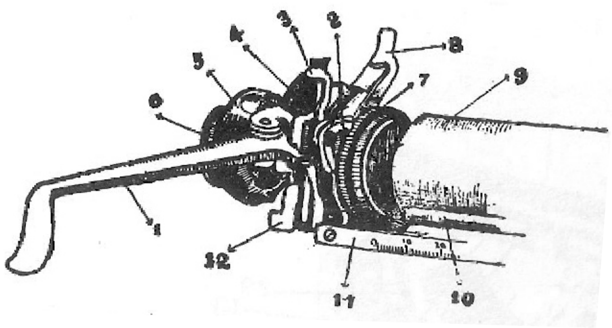
1. How many Non-character Keys in their Typewriter?.
2. How many character Keys in the standard key board?
3. What is meant by a Dead Key?
4. What are the Guide Keys and Home Keys ?
5. What are the Guide fingers?
6. What is the use of shift Keys and shift Lock?
7. What is the use of space Bar?
8. What is the use of Back Spacer?
9. How many kinds of shift system?
10. What is the use of margin Releaser?

4. CARRIAGE

CARRIAGE :

Carriage is an important part in a typewriter. The carriage can move in both the direction. Carriage moves towards left whenever the space Bar, Tabulator bar or carriage Releaser Lever is used.

Different sizes of carriage can be fitted to the Standard Typewriter.



Carriage and its parts

1. Line Space and Carriage Return Lever
2. Line Space Pawl
3. Line Space Knob
4. LineSpaceGauge (1,2,3)
5. Left Tumb Wheel
6. Variable Line Spacer
7. Cylinder Ratchet Wheel
8. Cylinder Ratchet Detent Release Lever
9. Cylinder otherwise called Planten
10. Paper Deflector
11. Frolnt Carriage Scale
12. Cylinder Lock

SIZES OF CARRIAGE:

1. Foolscap Size
80 degree to 100 degree

2. Draft Size
110 degree to 125 degree.

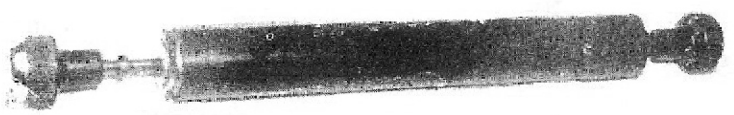
3. Brief Size
130 degree to 140 degree.

4. Police Size 180 degree.

5. Manifest Size 240 degree.

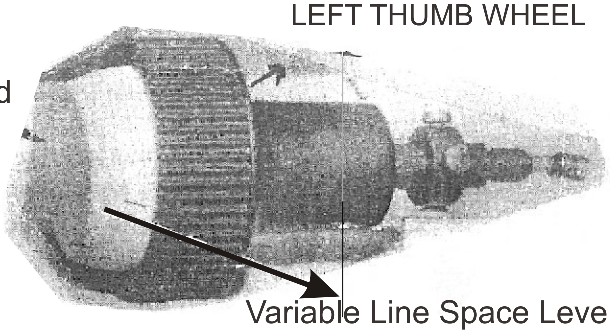
CYLINDER: It is also known as Platen. Cylinder is made of Rubber. The shape of the cylinder is round so as to get one impression at a time . It helps to feed the paper .

There are three kinds of Cylinders.
1. Soft Cylinder
2. Hard Cylinder
3. Medium Cylinder



The following points will prolong the life of the Cylinder:
1. By giving light touch.
2. By using backing sheet while typing.
3. No oil should be used for rubber parts. Use petrol or spirit and
4. Damaged or slippery cylinder is one of the causes for irregular line Spacing.
5. Punctuation marks should be typed gently in order to avoid injury to the Cylinder

THUMB WHEELS: Otherwise called as Cylinder Knobs. There are two thumb wheels / Cylinder knobs, each one on both the sides. It is used to insert and remove the paper from the cylinder. It is also used to rotate the Cylinder.



VARIABLE LINE SPACER :
1. To type on the ruled sheets.
2. To type Chemicals formula and Algebra sings.
3. To type component letter.
4. To Give fractional line space.

LINE SPACE LEVER: It is fitted on the left side of the carriage. It helps to return the carriage to the next writing line. So it is also called carriage return level

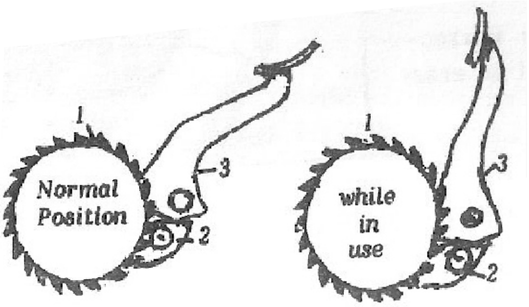
PAPER BAIL : It is fixed above the Cylinder and has two rollers.
It holds the paper firmly at the top. It prevents the paper from flying in the air. It helps to type up to the very bottom of the paper.

CARD HOLDERS: It helps to hold the paper. To type on cards, envelops and we can type at the top of the paper and also to the bottom edges of the paper. It is also used to draw vertical ruling.

CYLINDER RATCHET WHEEL : It is also known as line space ratchet wheel. It is a toothed wheel fixed at the left end of the Cylinder. It helps to regulate the line spaces (viz. single line space, one and half, two, two and half & 3. Etc).
Worn-out teeth of the Cylinder ratchet wheel is one of the causes for irregular line spacing.

DETENT ROLLER: It is a small steel roller pressing the tooth of the Cylinder. Cylinder rotates tooth by tooth to make space between lines. Worn-out detent roller

1. Cylinder Ratchet wheel
2. Detent Roller
3. Detent Release Lever



Is one of the causes for irregular line spacing.

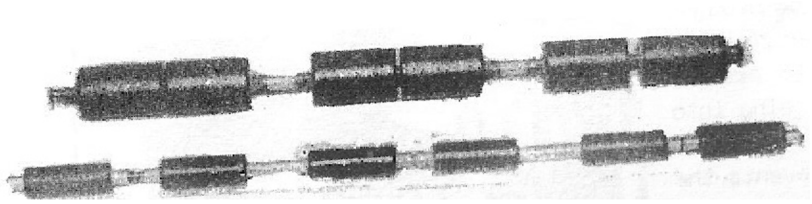
DETENT RELEASE LEVER: By using this lever we can type mathematical symbols and chemical formulae while the current page is being typed

LINE SPACE PAWL: It is acting on the Cylinder ratchet wheel. It is attached to the line space lever.

LINE SPACE GAUGE : It indicates single, double and treble line spacing. So, It is also called Line space Indicator.

LINE SPACE KNOB and also called LINE SPACE ADJUSTING LEVER or LINE SPACE REGULATOR. It acts on the line space gauge and controls the line spacing.

FEED ROLLERS: There are 2 sets of feed Rollers under the Cylinder. These are made of Rubber or Cork. When these feed rollers are in close contact with the Cylinder, they help to hold the paper firmly.



MARGINAL STOPS: There are two marginal stops. The are on the Marginal rack and moved to the desired degree in the marginal scale.

Left Marginal Stop:

1. Control the left margin.
2. Control the movement of the carriage towards Right.
3. Defective left marginal stop causes irregular left margin.

Right Marginal Stop:

1. Control the right margin.
2. Control the movement of the carriage towards Right.
3. It causes the ringing of the bell and the bell warns that the line of typing is coming to an end.
4. It locks the key levers.

TYPEWRITER SCALES: There are four scales in the typewriter.

1. Marginal scale or Paper Table Scale
2. Carriage Scale or Paper Bail Scale
3. Line finder Scale or Alignment Scale
4. Front Scale or Line Space Adjusting Scale

PAPER TABLE: It protects the paper from the oil parts.

RUBBER FEET: There are four rubber feet under the Typewriter for the protection of the machine.

METHOD OF TYPING: Two types of typing methods :

1. Sight Method: More strain, more mistakes -- Not advisable
2. Blind Method: Without seeing the key-board typing the matter. It increases the speed - Advisable.

Typing with uniform touch and with equal interval between operation of character keys is called 'Rhythmic Touch'.

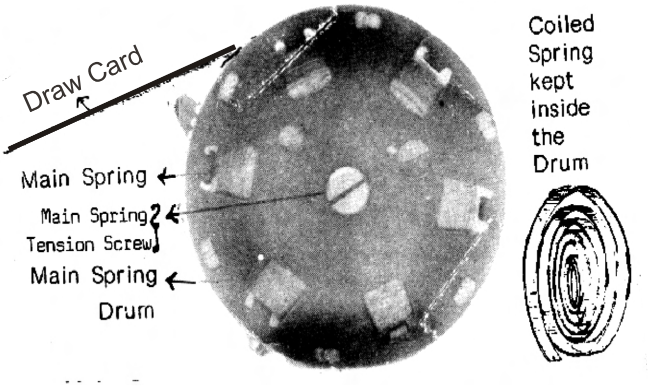
ERASER: The carriage should be brought to either end of the typewriter and correct the mistakes with an eraser, to avoid dust falling into the typewriter.

Questions:

1. Mention the various size of the carriage?
2. How many kinds of Cylinder?
3. How many scales are there in the typewriter?
4. How would you preserve the life of Cylinder?
5. Give the other name of the Thumb knobs and mention its uses?
6. What is the use of Line Space Adjusting Leaver?
7. What is the use of Card Holder?
8. How many marginal stops and what are the uses?
9. What is the use of Variable Line Spacer?
10. What is the use of Feed Roller?
11. How many Method of typing?
12. How to erase the mistake while typing?
13. How many rubber feet in the typewriter? Mention its uses?
14. What is the use of Cylinder Ratchet Wheel?
15. What is the use of Detent Roller?

Main Spring: Main Spring Drum (Back side)

5. MACHINE



MAIN SPRING DRUM:

It is located at the left back side of the Typewriter. In this drum there is mainspring with tension. This mainspring tension is other wise called Carriage Tension which is the most important of the Typewriter. The carriage moves from right to left due to this mainspring tension which is situated on the left side. In Urdu (language) Typewriters the mainspring is fixed in right side and so the carriage moves from left to right when we type. There is no mainspring in Electric Typewriters.

1. Too much main spring tension cause the jerky movement of the Carriage
2. Too low main spring tension cause the sluggish movement of the carriage.

There are other two main tensions in the Typewriter:

1. Key tension.
2. Touch Regulator tension.

DRAW CORD: It is also called as Draw Band or Draw Strap. One edge of the Draw Cord is hooked with the mainspring drum and the other edge is hooked with carriage end. Due to mainspring tension the connected draw cord pulls the carriage towards left. If the draw cord is cut off, the carriage will not move.

TYPE GUIDE or CENTRE GUIDE: It is also known as Common Centre Printing Point. It allows only one type bar to enter through and strike against the Cylinder while typing. It is cleaned with the Chamois Leather.

TYPE HEADS:

The following are the kinds of Type Heads/ Type faces:

1. Pica ... 10 Letters per inch
2. Elite ... 12 Letters per inch
3. Roman ... 09 Letters per inch
4. Gothic
5. Italics.
6. These typefaces should be cleaned with Petrol.

RIBBON MOVEMENTS: There are three Ribbon Movements of the carriage.

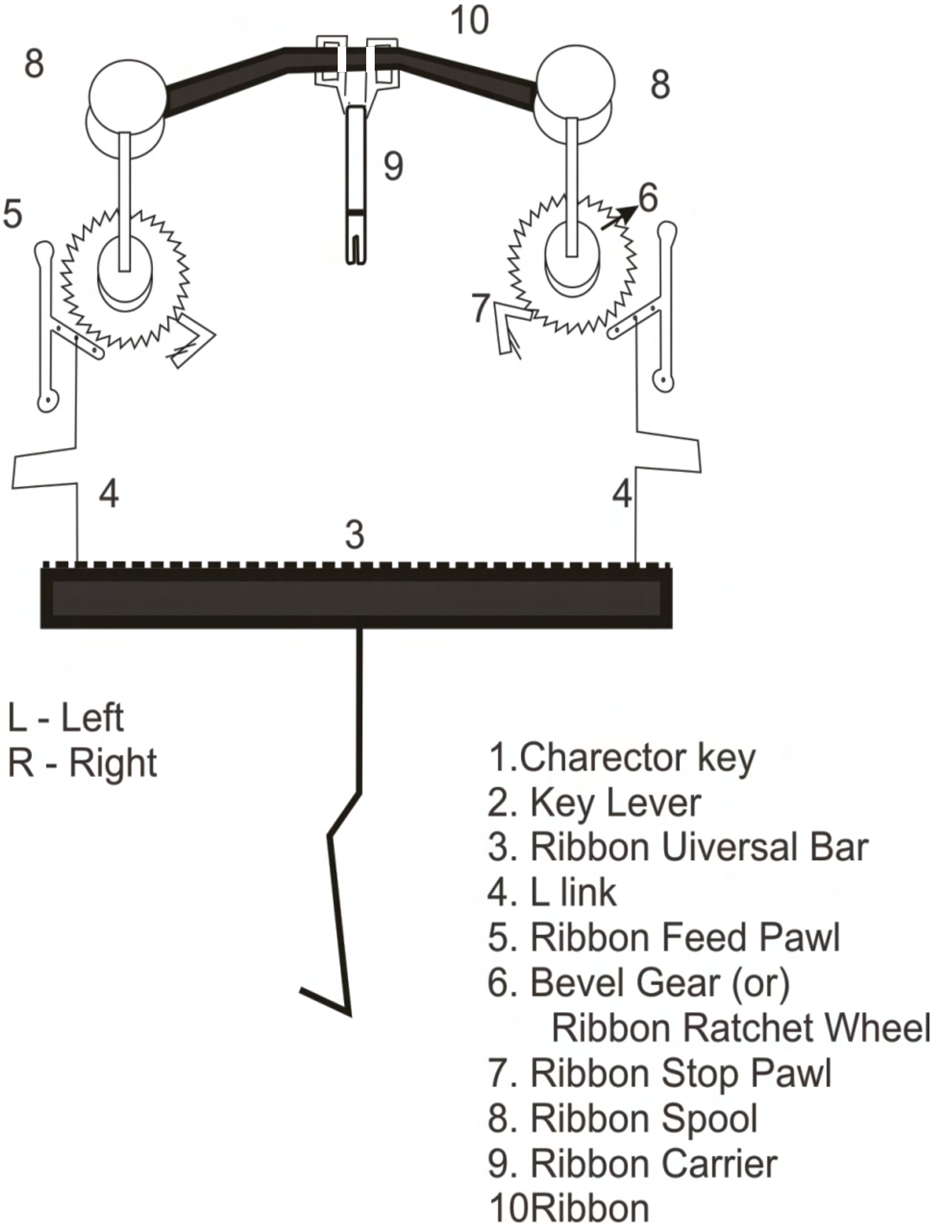
1.Up and down Movement
2.Lengthwise Movement
3.Automatic Reverse Movement

Up and down Movement is used to utilize the full Width of the Ribbon.

Lengthwise Movement is used to utilize the full length of the Ribbon.

Automatic Reverse Movement is used to utilize the Ribbon for many times.

RIBBON MOVEMENT OF THE CARRIAGE



RIBBON:
Ribbon take is made of cotton or silk, dipped in ink. It makes the impression visible on the paper.

There are two kinds of Ribbon:
1. Record Ribbon: It is used for ordinary purpose
2. Copying Ribbon: It is used for copying purpose

Double colour Ribbon is called 'Bi-chrome Ribbon'

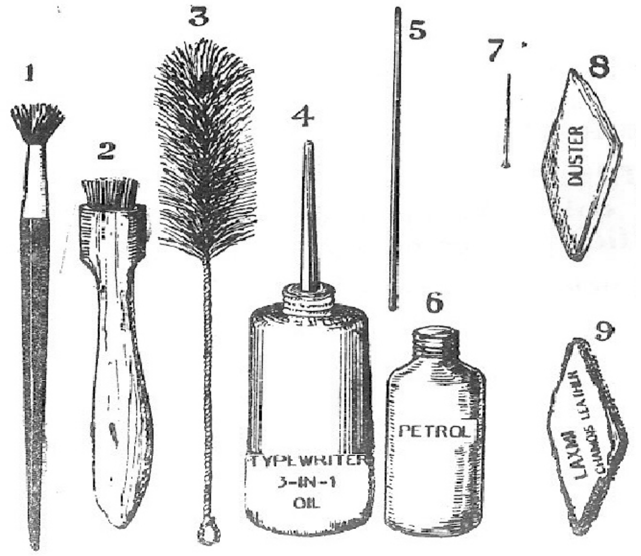
To preserve the Ribbon from moisture or from dryness the typewriter should be covered soon after the work is over. Normal length of the ribbon is 8 yards and ½ inch. Width.

Questions:

1. Where is the Mainspring drum Located?
2. What is the use of Mainspring?
3. What is meant by Draw Cord? Mention it's uses?
4. What is the use of Type guide?
5. Mention the kinds of Type faces/Type heads?
6. How many kinds of Ribbon?
7. Name the three movements of the Ribbon?
8. How may colour types of Ribbon?
9. Which is called Bi-colour Ribbon?
10. What is the other name of Type Guide?

6. CLEANING AND OILING

CLEANING MATERIALS :



1. Long handled Brush.
2. Type Cleaning Brush.
3. Wire Brush.
4. Oil Can
5. Touch Oiler
6. Petrol or spirit
7. Hat Pin or sharp pin
8. Duster Cloth
9. Chamois Leather or Polishing Cloth

1. Long Handled Brush is used to clean the outer parts (External Parts)of the Typewriter. (e.g. Carriage, Type bars, type segment and etc.)
2. Type Cleaning Brush is also known as Hard Brush. It is used to clean the type faces by dipping with petrol.
3. Wire Brush is used to clean the inner parts (Interior parts) such as key leavers.
4. Oil can is used for oiling the outer parts. Only Typewriter Oil or three-in-one oil is used for oiling the Typewriter.
5. Touch Oiler is used for oiling the interior parts (the frictional parts)- (like Ribbon gears, pinion wheel, escapement wheel, dogs and etc.)
6. Petrol or Spirit is used for cleaning the rubber parts (Cylinder, feed rolls, type faces, type segment and etc.)
7. Hat Pin or Sharp Pin is used to clean the dirt and dust which is filled in the slots (letters like a,e,o,u,d,g,r,q, and etc.)
8. Duster Cloth is used for cleaning the base board, metal cover and for wiping-out the excess of oil in the carriage way rods.
9. Chamois Leather or Polishing cloth is used to clean the nickel parts.

CARE TAKING OF TYPEWRITER:

1. Should clean the typewriter daily.
2. Should clean the typeface/type head fortnightly.
3. Should oil the typewriter monthly.
4. Overhauling Should be done once in a year.
5. Rubber parts, type faces should be cleaned with petrol.

UPKEEP AND MAINTENANCE:

1. Typewriter must be closed or covered when it is not in use.
2. It should be handled very carefully.
3. Hard touch must be avoided and light touch should be given

CARE SHOULD BE GIVEN WHILE PACKING:

1. Bring the carriage to the centre.
2. Two marginal stops should be brought to the centre (Close together)
3. Space bar must be tied with frame.
4. Shift Lock should be pressed
5. Cover the machine with metal cover or by good cloth.

7. ENVELOPE ADDRESSING

There are two methods of Envelope Addressing:

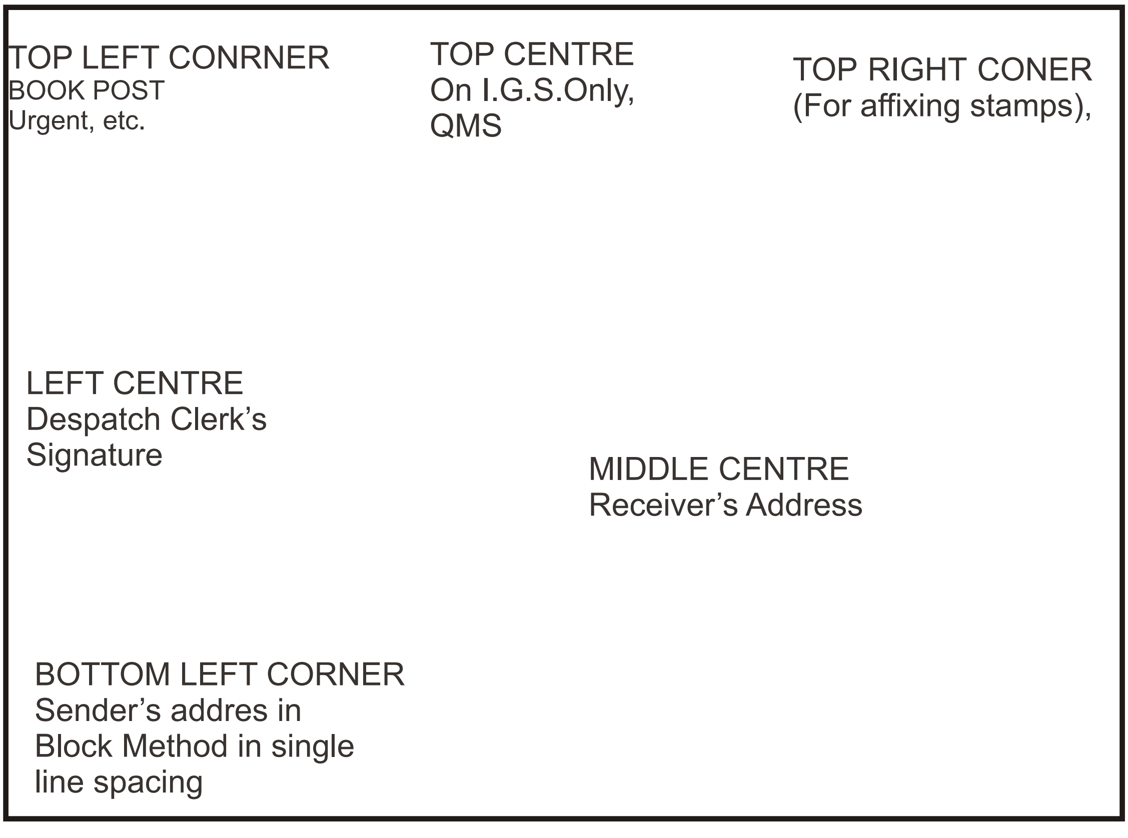
1. Block Method
2. Indent Method or Indentation Method

In Block Method of envelope addressing, all the lines of the receiver's address should be commenced from one and the same degree near the middle-centre of the envelope.

In Indent Method, the first line of the addressee's address is to be commenced near the middle centre of the envelope but the other lines should be commenced indenting or leaving five spaces after every one of the lines.

There are two types of envelopes:

1. Ordinary Envelopes or as Post Covers
2. Window envelope or Panel Envelope or Outlook Envelope.



ADVANTAGES:

1. Window envelopes generally used by Insurance Companies.
2. It saves labour and time.
3. Address need not be typed twice.
4. Risk of wrongly addressing in the Enveloping can be avoided
5. It can be visibly seen through glass paper of the window envelope.

PIN CODE NUMBER must be typed immediately following the name of the Town leaving a space after the first three digits. (e.g. Vellore 632 006)

Questions:

1. What are the materials required for cleaning and oiling?
2. What is meant by Window Envelope?
3. What are the advantages of Window Envelope?
4. How do you take care of your Typewriter?
5. How do you pack your machine during travel?
6. How many methods of Envelop addressing? What are they?
7. Where to type the 'To' address and 'From' address on the Envelope?

8. The following respectable terms are used either before commencing the name or the end of the name of the addressee:

Male (unmarried)	...	Master or Selvan, Mr. or Thiru. or Sri (Selvan B. Sughanthar Master A. Newton
Female (unmarried)	...	Miss or Selvi or Kumari (Miss Vijayanthi, Selvi. Raja Rajeswari
Male (married)	...	Mr. or Sri or Thiru. or at the end Esq. or Avl.(Thiru. K.Anandan, Amos Esq.)
Female (married)	...	Mrs. or Smt. or Tmt . (Tmt. Savithiri Balaji)
Company(with personal name)	...	M/s.or Messrs. (M/s.Spencer & Company)
Company(with impersonal name)	...	The (The Imperial Industry Ltd.,)
Before the designation of officials	...	The (The Manager)
Governor or President of India	...	H.E. (His Excellence) His Excellency the Government of Tamil Nadu.
Madathipathis Head of Mutts Pope	....	H.H. (His Holiness). His Holiness Kanchi Kamakodi Jaganatha Swamigal
Christian Priest / Monks	.....	Rev . Father Arul Francis
- do Nuns	. ...	Rev. Sister. Daisy Rani
Judges	....	Mr. Justice Perumalswamy Chief Justice Mr. (name)........
Respectable authorities or persons	....	Hon'ble Thiru. or Hon'ble sir
- do ladies	....	Hon'ble Tmt . or Hon'ble Smt .
Physician Males	....	Dr. Lionel Royston
Physician - Female	....	Dr. (Mrs.) or Dr.(Kumari) or Dr. (Tmt) Or Dr.(Smt) or Dr. (Selvi)
Muslim Males	....	Janab S.Hayath Basha Sahib
Muslim Ladies	....	Janaba M.A. Zehrajabeen Sahiba

9. MECHANISM QUESTION & ANSWERS

1. What is a typewriter?

Typewriter is a machine which produces impression like a print.

2. Who invented the Typewriter and when?

Sir. John Henry Mill invented the Typewriter in 1714. First Typewriter brought to India in 1876. Electronic Typewriters were introduced invented in 1936 by Muthiah of Ceylon. In 1958 Tamil Nadu Government approved a Standardized Tamil Key Board.

3. What are the various kinds of Typewriter?

There are two kinds of Typewriters. They are:

1. Standard Typewriter 2. Portable Typewriter

Standard Typewriters are used in Offices, Institutes and Schools.

Portable Typewriters are used for Camp purposes.

4. How can a typewriter be identified?

A Typewriter can be identified by its make (Model) and its serial number.

5. How many keys are there in the Keyboard?

There are 44 Character Keys and 11 Non-character keys in the Keyboard.

6. What is meant by a "Dead Key"?

The Dead Key causes impression but does not causes the carriage to move. It shows in the Language Typewriters.

7. What is Character Key? What is non character key?

The key which give impression while typing are called Character Keys. Keys which do not give impression are called non-character keys.

8. Mention the Non-Character keys?

(A) Space Bar, [Shift key], [c] Shift lock, [d] Back Spacer key,[e] Tabulator Bar, [f] Tabulator set key, [g] Tabulator clear key, [h] Margin Releaser, [i] Key Release key.

9. What is the use of Space Bar?

Space Bar is used to give one space between one word to another. The carriage moves to left when it is pressed. It is also used to type vertical borders in display work. Space Bar is fixed at the bottom of the key Board. This should be operated by right thumb.

10. What is the use of Back Space Key?

Back space key is used to type (to fill up) the omitted characters. The Carriage moves one space to right side when it is press.

11. What is the use of shift key and shift lock?

Shift key is used to Type upper case characters (Capital letters) occasionally and to release the Shift Lock. Shift lock is used to type upper case characters continuously.

12. What are the Guide Keys?

Guide keys are 'A' and ';'.

13. What are Home Keys? Why are they so called?

'asdf' and ';lkj' are called Home keys. Because the respective fingers should remain on these keys when not striking the other keys.

14. Which is the Master Key? What is the use of Master Key?

Keys with capital letters 'N' and 'H' are called Master keys. It is used to check the alignment of other types.

15. What are the various sizes of Typewriter?

[A] Foolscape 80 -100 degree [b] Brief size 140 degree [c] Policy 180degree [d] Manifest 240.

16. State the different kinds of Type faces?

Pica (10 letters for one inch)
Elite(12 letters for one inch)
Roman/Large pica (8 letters for one inch)
Madrid pica, Cubic pica, Cheque Writer, Italic, Script etc.
The Kind types that is most commonly used in pica and Elite.

17. What are the two kinds of shift systems ?

a) Carriage shift system b) Segment shift system. Segment shift system is advantageous.

18. What are the uses of Type bar cushion or Rubber bed ?

Type bar cushion is arranged under the type faces. It reduces the sound while typing . It prevents damage to the type bars.

19. What are the uses of variable Line spacer?

The Variable Line spacer is used to type on ruled papers, to type chemical formula and fractions, to type algebra sings and to type double total lines

20. What is the link between pinion wheel and the carriage ?

The carriage Rack is the link between pinion wheel and the carriage.

21. When the Typewriter is to be taken to distant places, how should the marginal stops be placed?

The two marginal stops should be brought together to the centre place of the carriage. The carriage does not move either left or right side.

22. Why is the carriage always moving from right to left?

The mainspring which givers the tension to draw the carriage is fixed in; the left back side of the typewriter. So the carriage is moving always from right to left,

23. How many movements of ribbon are there?

There are three movements:

a. Step by step movement of Lengthwise movement.

b. Up and down movement or Breath wise movement.

c. Automatic reversal movement.

24.What is meant by alignment?

Alignment is the forming of letters in a regular line with even space between them.

25. What happens if the Draw Cord snaps?

The Carriage suddenly dashes to the left side.

26. What is Mainspring? Describe the function?

Mainspring is a coiled spring. It is screwed tightly and fixed in the Mainspring Drum. Mainspring Drum is fixed in the left backside of the machine. It supplies the motive power to draw the carriage towards left through the draw cord.

27. How Many rubber feet are in the Typewriter? What are the uses of it?

There are four rubber feet in the typewriter.

Uses: 1. To reduce the sound and prevent the machine from moving while typing.

2. To prevent damage to the key levers.

28. How many methods followed in typing? What are they?

There are two methods of manipulation of the key board

They are 1)Touch method or Blind method

2) Sight method

29. What is meant by touch system?

Touch system means mentally locating the position of the keys by sense of touch without looking at the key board.

II. INTRODUCTION TO COMPUTER OPERATION:

Knowing About Computer

What is a Computer?

We use Typewriter Machines in our daily life. Typewriter Machines make our work easy. Machines save our time, energy and give us comfort. But a Computer is an advanced machine found from the basic of the typewriter.

Computer is also a Machine. It helps us to do our work with ease and makes our life easy. Computers are used in almost all walks of life.

Computers work on electricity. They need to be switched ON before we can use them. We switch ON rthe Computer using the ON/OFF Switch. When we switch ON the Computer, Electricity flows from the Power Plug through the Power Cable to the Computer. To check whether a Computer or its part is ON or OFF, we need to check the Power-ON l Light . If the light glows it is ON, Or else, It if OFF Almost all the Computer parts have Power ON Lights on them.

· Electricity is dangerous . Never touch Plugs or wires when the Computer is ON. You can get hurt if you are not careful.

Early History

2500 BC - The Abacus
1614 AD - Napier`s Bones
1633 AD - The Slide Rule
1642 AD - The Rotating wheel Calculator
1822 AD - The Difference Engine
1890 AD - Generation of Computers

Generation of computers

First Generation	-	1940 - 1956 : Vacuum Tubes
Second Generation	-	1956 - 1963 : Transistors
Third Generation	-	1964 - 1971 : Integrated Circuits
Fourth Generation	-	1971 - Present : Microprocessors
Fifth Generation	-	Present and Beyond : Artificial Intelligence

Data, Information and Program

Computer is a tool for solving problems. Computers accept instructions and data, perform arithmetic and logical operations and produce information. Hence the instructions and data fed into the computer are concerted into information through processing.

Data → **Processing** → **Information**

Basically data is a collection of facts from which information may be derived. Data is defined as an un- processed Collection; fo raw facts in a manner suitable for communication, interpretation or processing.

Hence data are

Stored facts
Inactive
Technology based
Gathered from various sources.;

On the other hand information; is a collection of facts from which conclusions may be drawn. Data that has been interested, translated or transformed to reveal the underlying meaning. This information can be represented in textual, numerical, graphic, Cartographic, narrative, or audiovisual forms.

Hence information is
Processed facts
Active
Business Based
Transformed from data

Algorithm is defined as a step-by-step procedure or formula for solving a problem i.e.a a set of instructions or procedures for solving a problem. It is also defined as a mathematical procedure that can usually be explicitly encoded in a set of computer language instruction that manipulate data.

A computer program (or set of programs) is designed to systematically solve a problem. For example, a problem to calculate the length of a straight line joining any two given points.

The programmer must decide the program requirement develop logic and write instructions for the computer in a programming language that the computer can translate into machine language an d execute. Hence, problem solving is an act of defining a problem understanding the problem and arriving at workable solutions.

In other words, problem solving is the process of confronting a novel situation, formulating connection between the given facts identifying the goal of the problem and exploring possible methods for reaching the goal. It requires the programmer to co-ordinate previous experience and intuition in order to solve the problem.

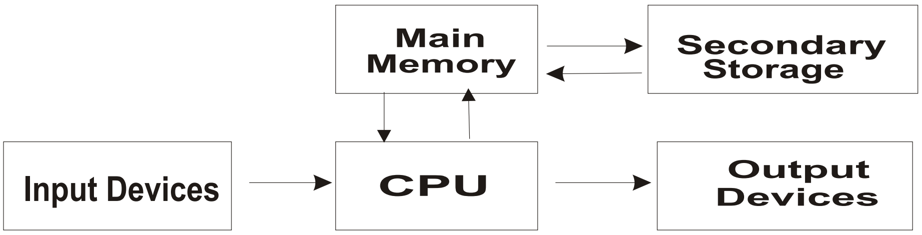
Hardware and Software

Introduction

A computer system has two major components, hardware and software. In practice, the term hardware refers to all the physical items associated with a computer system. Software is a set of instructions, which enables the hardware to perform a specific task

Computer Hardware

A computer is a machine that can be programmed to accept data (input), and process it into useful information (Output). It also stores data for later reuse (storage). The processing is performed by the hardware. The computer hardware responsible for computing are mainly classified as follows:



Input devices allows the user to enter the program and data and send it to the processing unit. The common input devices are keyboard, mouse and scanners.

The **Processor**, more formally known as the central processing unit (CPU), has the electronic circuitry that manipulate input data into the information as required. The central processing unit actually executes computer instructions.

Memory from which the CPU fetches the instructions and data is called main memory. It is also called as primary memory and is volatile in nature.

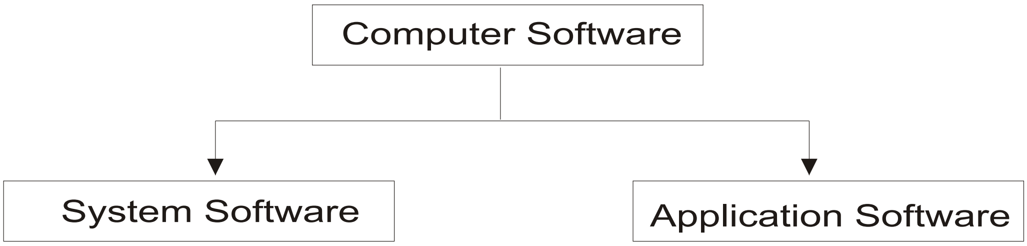
Output devices show th processed data - information - the result of processing. The devices are normally a monitor and printers.

Storage usually means secondary storage which stores data and programs. Here the data and programs are permanently stored for future use.

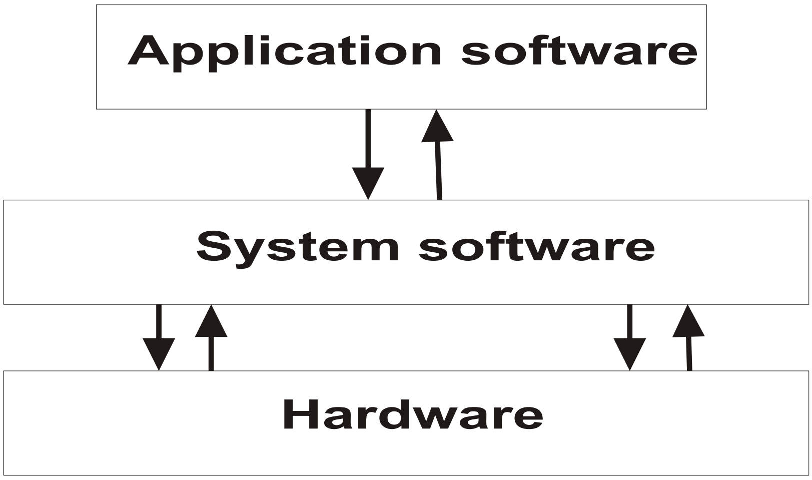
The hardware devices attached to the computer are called peripheral equipment. **Peripheral equipment** includes all input, output and secondary storage devices.

Computer software

Software refers to a program that makes the computer to do something meaningful. It is the planned, step-by-step instruction required to turn data into information. Software can be classified into two categories: System Software and Application Software.

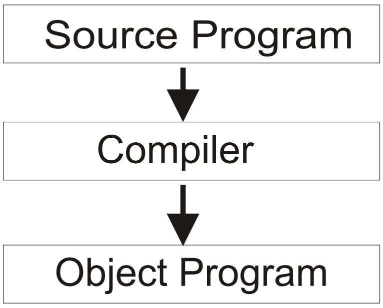


System software consists of general programs written for a computer. These programs provide the environment to run the application programs. System software comprises programs, which interact with the hardware at a very basic level. They are the basic necessity of a computer system for its proper functioning. System software serves as the interface between hardware and the user .The operating system compilers and utility programs are examples of system software



The most important type of system software is the operating system. An operating system is an integrated act of specialized programs that is used to manage the overall operations of a computer.. It acts time an interface between the user, computer hardware and software. Every computer must have an operating system to run other programs. DoS (Disk Operating System), Unix, Linux and windows are some of the common operating systems.

The comelier software translates the source program user written program) into an object program (binary form). Specific compilers are available for computer programming languages like FORTRAN, COBOL, C, C++ etc. The utility programs support the computer for specific tasks like file copying, sorting, linking a object program, etc.



An Application software consists of programs designed to solve a user problem. It is used to accomplish specific tasks rather than just managing a computer system. Application; software are in turn, controlled by system software which manages hardware devices.

Some typical examples are : railway reservation system, game programs, work processing software, weather forecasting programs. Among the application software some are packaged for specific tasks. The commonly used application Software packages are word processor, spread sheet, database management system and graphics.

One of the most commonly used software package is word processing software. Anyone who has used a computer as a word processor knows that it is far more than a fancy typewriter. The great advantage of word processing over a typewriter is that you can make changes without retyping the entire document. The entire writing process is transformed by this modern word processing software. This software lets you create, edit, format, store and print text and graphics. Some of the commonly used word processors are Microsoft word, WordStar, WordPerfect, etc.

Spreadsheet software packages allow the user to manipulate numbers. Repetitive numeric calculations, use of related formulae and creation of graphics and charts are some of the basic tools. This capability lets business people try different combinations of numbers and obtain the results quickly. Lotus1-2-3, Excel, etc. are some of the famous spreadsheet applications

Type of Software	Functions	Examples
Word Processors	All personal Computers are loaded with word processing software which has the same function as a typewriter for writing letters, preparing reports and printing	Microsoft word, Word Perfect, Word star
Spreadsheet	A table containing text and figures, which is used to Calculations and draw charts	Microsoft excel, Lotus 1-2-3
Database Management System	Used for storing, retrieval and Manipulation; of Information	Microsoft Access, Oracle.

Basic Components of a Digital Computer

Introduction

Computers are often compared to human beings since both have the ability to accept data, store, work with it, retrieve and provide information. The main difference is that human beings have the ability to perform all of these actions independently Human being also think and control their own activities. The computer, however, requires a program (a predefined set of instructions) to perform an assigned task. Human beings receive information in different forms, such as eves, ears, nose, mouth, and even sensory nerves. The brain receives or accepts this information, works with it in some manner, and then stores in the brain for future use. If information the time requires immediate attention, brain directs to respond with actions. Likewise the central Processing Unit (CPU) is called th brain of the computer. It reads and executes program instructions, performs calculations and makes decisions.

Components of a Digital Computer

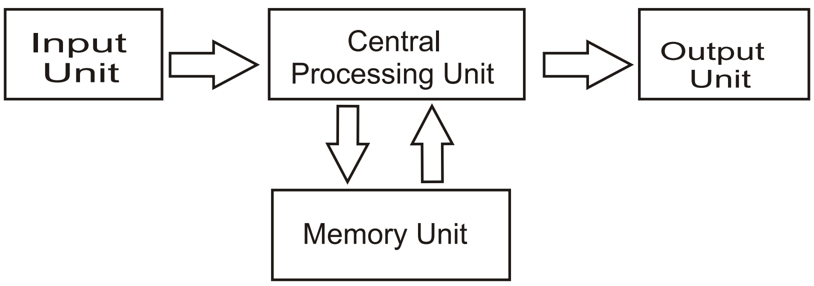
Computer system is a tool for solving problems. The hardware should be designed to operate as fast as possible. The software (system software) should be designed to minimize the amount of idle computer time and yet provide flexibility by means of controlling the operations. Basically any computer is supposed to carry out the following function.

- Accept the data and program as input
- store the data and program and retrieve as and when required.
- Process the data as per instructions given by the program
- Communicate the information as output

Based on the functionalities of the computer, the hardware components can be classified into four main units, namely

- Input Unit
- Output Unit
- Central Processing Unit
- Memory Unit

These units are interconnected by minute electrical wires to permit communication between them. This allows the computer to function as a system. The block diagram is shown below.



Functional Units of a Computer System

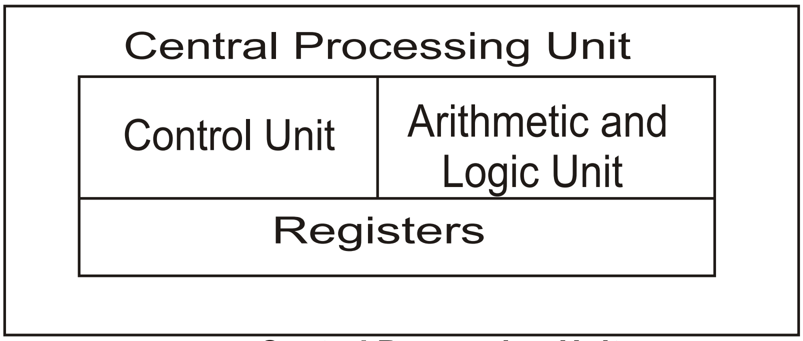
Input Unit

A Computer uses input devices to accept the data and program. Input devices allow communication between the user are the computer. In modern computer keyboard, mouse, light pen touch screen etc, are some of the input devices.

Output Unit

Similar to input devices, output devices have an interface between the computer and the user. These devices take machine coded output results from the processor and convert them into a form that can be used by human beings. In modern computers, monitors (display screens) and printers are the commonly used output devices.

Central Processing Unit



Central Processing Unit

CPU is the brain to any computer system. It is just like the human brain that takes all major decision, makes all sorts of calculations and directs different parts of the computer function by activation and controlling the operation. It consists of arithmetic and logic units, control unit and internal memory (registers). The control unit of the CPU co-ordinates the action of the entire system. Programs(software) provide the CPU, a set of instruction to follow and preform a specific task. Between any two components of the computer system, there is a pathway called a bus which allows for the data transfer between them

Control unit controls all the hardware operations, , those of input units, output units, memory unit and the processor. The arithmetic and logic units in computers are capable of performing addition, subtraction, division and multiplication as well as some logical operation. The instruction and data are stored in the main memory so that the processor can directly fetch and execute them.

Memory Unit

In the main memory, the computer stores the program and data that are currently being used. In other words since the computers use the stored program concept, it is necessary to store the program and data in the main memory before processing.

The main memory holds data and program only temporarily. Hence there is a need for storage devices to proved backup storage., They are called secondary storage devices or auxiliary memory main memory and is much less expensive.

Stored Program Concept

All modern computer use the stored program concept. This concept is known as the Von-Neumann concept due to the research paper published by the famous mathematician John Von Neuman. The essentials of the stored program concept are

- the program and data are stored in a primary memory (main memory)
- once a program is in memory, the computer can execute it automatically without manual intervention.
- the control unit fetches and executes the instructions in sequence one by one.
- an instruction can modify the contents of any location in the stored program concept is the basic operating principle for every computer.

Central Processing Unit

Functions of a Central Processing Unit

The CPU is the brain of the computer system. It performs arithmetic operations as well as controls the input, output and storage units. The functions of the CPU are mainly classified into two categories :

- Co - ordinate all computer operations
- Perform arithmetic and logical operations on data

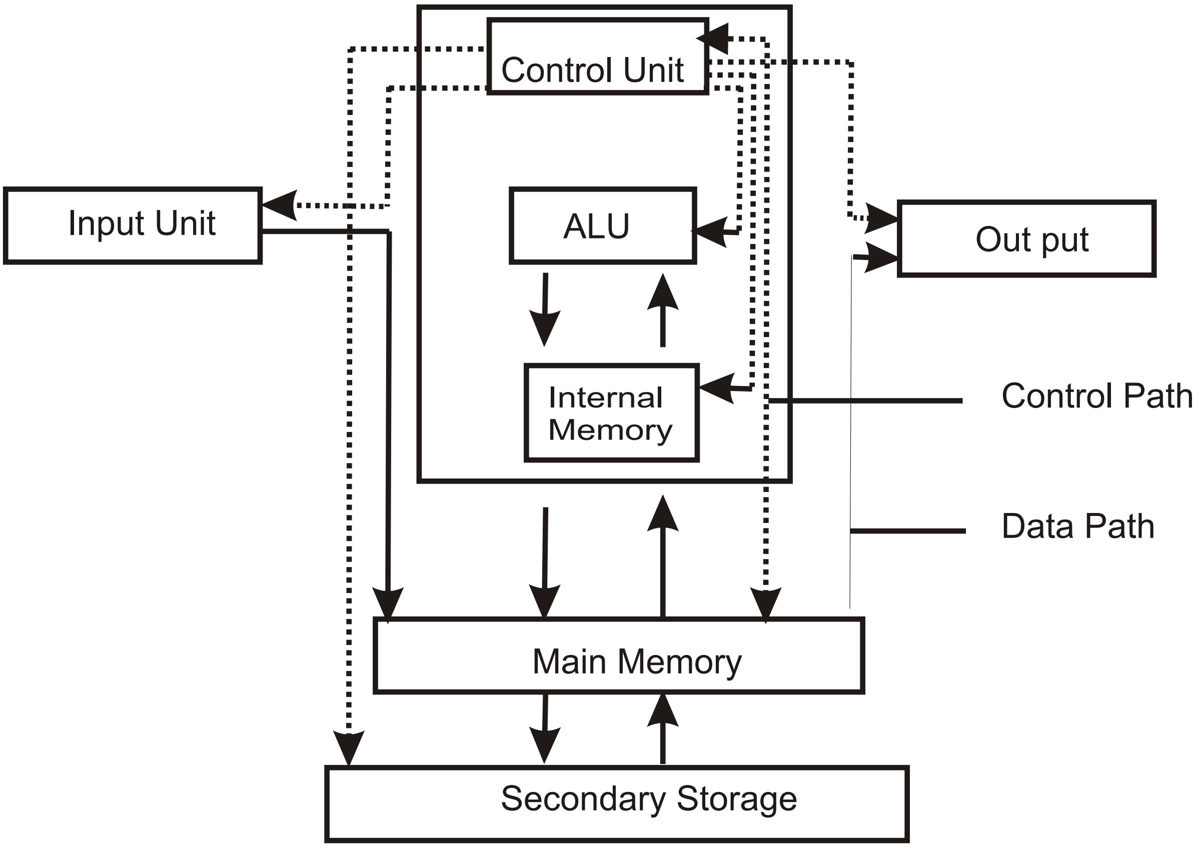
The CPU has three major components.

- Arithmetic and Logic Unit
- Control Unit
- Registers (internal memory)

They arithmetic and logic unit (ALU) is the part of CPU where actual computations take place. It consists of circuits which perform arithmetic operation over data received from memory and are capable of comparing two numbers.

The Control unit directs and controls the activities of the computer system. It interprets the instructions fetched from the main memory of the computer, sends the control signals to the devices involved in the execution; of the instructions.

While performing these operations the ALU takes data from the temporary storage area inside the CPU named registers. They are high-speed memories which hold data for immediate processing and results of the processing.



Functions of a CPU

Working with Central Processing Unit

The CPU is similar to a calculator, but much more powerful. The main function of the CPU is to perform arithmetic and logical operations on data taken from main memory. The CPU is controlled by a list of software instructions. Software instructions are initially stored in secondary memory storage device such as a hard disk, floppy disk, Cd - ROM, or magnetic tape, these instructions are then loaded onto the computer`s main memory.

When a program is executed, instructions flow from the main memory to the CPU through the bus. The instructions are then decoded by a processing unit called the instruction decoder that interprets and implements the instructions. The ALU performs specific operations such as addition, multiplication, and conditional tests on

the data in its registers, sending the resulting data back to the main memory or storing it in another register for further use.

To understand the working principles of CPU, let use go through the various tasks involved in executing a simple program. This program performs arithmetic addition on two numbers. The algorithm of this program is given by

(1) Input the value of a
(2) Input the value of b
(3) Sum = a+b
(4) Output the value of sum

This program accept two values from the keyboard, sums it and displays the sum on the monitor. The steps are summarized as follows :

1. The control unit recognizes that the program (Set of instructions) has been loaded into the main memory. Then it begins to executes the program instructions one by one in a sequential manner.
2. The control unit signals the input device(say keyboard) to accept the input for the variable 'a'.
3. The user enters the value of 'a' on the keyboard.
4. The control unit recognizes and enables to route the data (Value of a) to the pre-defined memory location (address of 'a').
5. The steps 2 to 4 will be repeate4d for the second input 'b' The Value of 'b' is stored in the memory location (address of 'b').
6. The next instruction is an arithmetic instruction. Before executing the arithmetic instruction, the control unit enables to send a copy of the values stored in address of 'a' and address of 'b' to the4 internal registers of the ALU and signals the ALU to perform the sum operation
7. The ALU performs the addition. After the computation, the control unit enables to send the copy of the result back to the memory (address of 'sum').
8. Finally, the result is displayed on the monitor. The control unit enables to send the copy of the values of the address of 'sum' to the monitor (buffer) and signals it. The monitor displays the result.
9. Now this program execution is complete.

The data flow and the control flow of CPU during the execution of this program is given as

Summary

* Computers are often compared to human beings since both have the ability to accept data, store, work with it, retrieve and provide information.

* A computer system is the integration of physical entities called hardware and non-physical entities called software.

* The hardware components include input devices, processor, storage devices and output devices.

* The software items are programs and operating aids so that the computer can process data.

* A computer uses input devices to accept the data and program.

* In modern computers, monitors and printers are the commonly used output devices.

* CPU is the brain of any computer system. It consists of arithmetic and logic units control unit and internal memory (registers).

* Control unit controls all the hardware operations, ie, those of input units, output unit and the processor.

* The arithmetic and logic units in computers are capable of performing addition, subtraction, division and multiplication as well as some logical operations.

* In the main memory, the computer stores the program and data that are currently being used.

* All modern computers use the stored program concept. This concept is due to John Von Neuman.

* The smallest unit of information is a single digit called a ‘bit’ (binary digit), which can be either 0 or 1.

* The Secondary memory is the memory that supplements the main memory. This is a long term non-volatile memory.

* The most common input device is the keyboard.

* Mouse is an input device that controls the movement of the cursor on the display screen.

* Monitor is a commonly used output device.

* Some of the commonly used storage devices are hard disks, magnetic tapes, floppy disks and CD-ROM.

Uses of Computers

Computers are very useful Machines. Unlike many other machines that have definite purposes, a Computer can do any number of things. They help us to play games, write letters, do calculations, draw and paint pictures, listen to music, watch movies, etc. Computers are used in many places. Some of the common places are:

Business places and in Other places:

Computers are used in business places like shops, Offices, Banks, Homes schools Industries, etc. There are many repetitive jobs in business places, Computers are used very effectively to handle three types of jobs, since they never get bored doing the same thing again and again.

Features of the Computer+

A Computer has the following four important qualities. These are what that makes a Computer such a special machine.

1. The Computer works very fast. It can do a number of calculations in a second. At best, we can only do one such calculation in ka few seconds.
2. We might make mistakes, while we work. But the Computer never makes mistakes. It always gives results correctly. The Computer never gets tried. It can work continuously for many hours.
3. Computers have a large memory. They can store large amounts of information.
4. Unlike other machines, A Computer can do a verity of Jobs.

Types of Computers:

l Micro Computers
l Mini Computers
l Main Frame Computers
l Super Computers.

Main parts of the Computers are:

l The System Unit
l Monitor
l Key board
l Mouse

The System Unit looks like a box.
All the Other Computer parts (called Peripherals')
are connected to the System Unit. The System Unit is a very important part of the Computer because it contains the 'Central Processing Unit (CPU) The CPU

is the Computer's most important part because:

λ The CPU does all the work that we give to the Computer.

λ It controls all the activities of the Computer. Hence, it is also called the 'Brain' of the Computer.

λ The CPU is a single semiconductor chip made of Silicon. It sits inside the System Unit. It is fitted on the main circuit board of the Computer called the 'Mother Board'

λ In the system, the Input Devices get data and instructions from the user, and then place them in the Main Memory (RAM)

λ The CPU takes these (data and instructions) from the Main Memory and then processes it. It then sends the results back to the Main Memory. The results are then send from the Main Memory to the Output Devices for the user.

Λ CPU is also known as the 'Microprocessor'

In early Computers, CPUs were made of Vacuum Tubes and were very large.

The CPU has two main components:

1. Arithmetic and Logic Unit (ALU)
2. Control Unit.

The Arithmetic and Logic Unit carries out all the arithmetic (calculations like addition subtraction, multiplication and division) and Logic (comparisons like A>B) operations of the Computer. The Control Unit controls the activities of the ALU, Memory and the other devices.

A CPU's speed is measured in Mega Hertz (MHz) or Giga Hertz (GHz).

MONITOR:
After processing the Input, the Computer presents the results to us through the Output devices. The Monitor and the Printer are the most common Output Devices of the Computer (but there are many more)

l Monitor is also called 'Screen'

l The Monitor is connected to a circuit board called 'Display Adapter Card' in side the System Unit.

A Monitor looks and works like a TV set. It is an Output Device that displays information from the Computer (like text, pictures, movies, etc.,) It also displays our instructions that we type using the keyboard. There are two

types of Monitors Monochrome and Colour. Monochrome Monitors display information in a single colour whereas Colour Monitors display information in various colours. Monitors come in different sizes. Monitor resolution is determined by the number of 'Pixels' (which is the short for 'Picture Elements') A Monitor with greater number of Pixels has a higher resolution and hence can display a sharper picture.

There are various Controls on the Monitor. These are used to control the Brightness, Contrast and the Position of the picture on the Monitor.

There is an ON/OFF Switch to turn the Monitor ON or OFF. There are also Controls to adjust the following:

Brightness: This helps us to adjust the brightness of the picture on the Monitor.
Contrast: This helps us to adjust the contrast of the picture on the Monitor.

Apart from these, there are a few other controls to control the position of the picture on the Monitor. We will learn about these later.

KEYBOARD:

We give the input to the Computer using the Input Dev ices The Keyboard and the Mouse are the most common Input Devices of he Computer (but there are many more)

l The Keyboard is an Input Device.

l It is used to enter information into the Computer. Most Keyboards have 101 keys The job of each key is printer on it.

A Keyboard has a set of Alphabet Keys, (A to Z are marked) Number keys (0 to 9), Function keys (The keys labeled F1 to F12 on the top of the keyboard)and some Special keys.

Special Keys are located at different places on the keyboard.

Some of the Special Keys are:

1. Enter Key.
2. Spacebar Key.
3. Caps Lock Key
4. Backspace Key
5. Delete Key

The Enter Key is the big fat Key. It is used to enter instructions into the Computer. It is also used to type anew line ink the Computer. We press the Enter Key with our right pointing finger.

The long thin Key at the bottom of the Keyboard is called the Spacebar. This is the longest Key on the Keyboard. The spacebar is used to give space between words. We press the spacebar with our thumb.

Caps Lock Key is used to type letters in capitals(upper case). After pressing this key once, whatever we type appears in capital letters. After pressing this key once again, whatever we type appears in small letters.

The Backspace Key and the Delete Key are just like Erasers. Both are used to correct mistakes while typing. When we press the Back space key, the letter to the left of the Insertion Point is erased. Pressing the Del Key deletes a letter to its right

When typing the Keys of the Keyboard of the Computer, the following correct sitting posture should be followed always:

λ Sit at the right height
λ Keep the elbow slow and down by your sides.
λ Pull the Keyboard to the edge of the table
λ Hold the hands with curved fingers over the keys.
λ Place your wrist off the table,
Λ Put both your feet on the floor (if possible)

MOUSE

The Mouse is also an Input Device. It has a tail and looks like a real Mouse. It has two buttons at the top-left and Right. Some moue comes with three buttons (Left, Right and Middle button) A Mouse is connected to the Computer with a cable. When we switch on the Computer, a Pointer that looks like an arrow appears on the Monitor. This is called the 'Mouse Pointer' Mouse allows us to move the Mouse Pointer on the Computer Screen.
We can do the following things using the Mouse:

λ Point λ Left - Click λ Right click λ Double Click

λ Drag and Drop

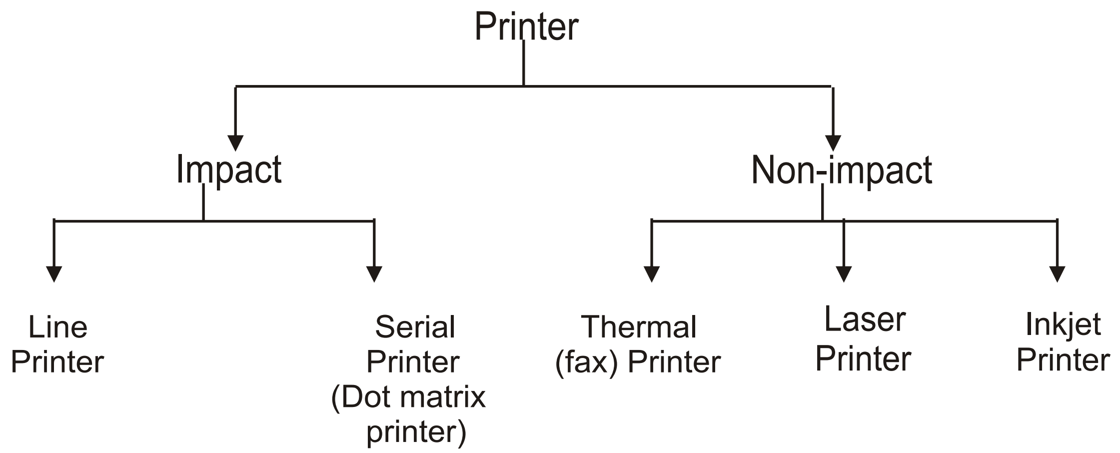
The Mouse has a Ball under it. The Mouse moves on this ball. This is called the 'Tracking Ball' It is similar to the Steering Wheel of a car. It helps us to control where the Moue Pointer on the Computer Screen is going. When we move the Mouse, The Tracking Ball also moves. This makes the Mouse Pointer also to move.

We should always use a Mouse with a Mouse Pad. Or else, it will get spoilt. While working, if the Mouse goes off the edge of he Mouse Pad, e should pick it up and place it in the center of the Mouse Pad.

Trackball: Trackball is a pointing device similar to a Mouse. It also allows us to move the Pointer on the Computer screen. It consists of a ball resting on two rollers and one or more buttons. If we roll the ball using our finger, the pointer moves on the computer screen. Trackballs are usually found in Laptop computers.

Pinter

Printer is an output device that prints text or images on paper or other media (Like transparencies). By printings you create what is known as a `hard copy` There



CHAPTER - I

AN INTRODUCTION TO WINDOWS XP

What is windows XP?

Windows XP Professional is a user-friendly operating system designed for popular use. The most important advantage of using windows is its GUI (pronounced as GOOYEE). It is said that the right side brain is good in processing the pictures and is the seat of creative thinking and intuitive ideas whereas the left side brain is good at logical thinking. It is believed, before the introduction of GUI, users of OS, mainly used their left side brain, keeping their right side brain idle. It is felt, Windows effectively uses the left and right side of the brain. Many other operating systems (including MS-DOS) use Command Line Interface (interface lets any one connected with the machine. Actually interface is a (virtual) connection between two entities. For example, T.V. Remote is an interface which connects a user and a T.V). In this kind of interface, you have to remember cryptic Commands and type them without mistakes. To make things worse some operating systems are case-sensitive also (LS, Ls, IS or Is are not same) . A simple spelling mistake or missed space will result in an error. Windows displays all the information on the screen and all you have to do is to point and select using the mouse, with its GUI. A picture is worth a thousand of words, as they say.

Windows XP Professional combines all the positive aspects of its Microsoft predecessors. This satisfies all the users who want to prevent frequent crashing of software and want to use easy techniques.

Mouse

If you want to extract work from the computer, you have to input data. The input can normally be provided by the keyboard and the Mouse. You know the keyboard. It you want to move from cone window to another, unless you know the keyboard combinations, it will be very difficult to move one window to another by using keyboard. But the mouse intuitively provides the idea.

As you have learnt in the earlier section, windows XP uses GUI. That is, all information is displayed on the screen. You can use it by simply pointing to it and selecting. To do this you use the mouse. The mouse is an input device that you move on a flat surface (usually a mouse pad.) When you move the mouse, a pointer movers on the screen. This pointer, called the Mouse Pointer, is used to point to things on the screen. The mouse has either two or three buttons on the top. The left button is the most often used. Described below are mouse actions that you need to know to use window XP effectively.

Note-Click on and click are used interchangeably for example you can write Click on the button or click the button. Both forms are used in this chapter.

1) **Move:** Moving the mouse is simply dragging the mouse on the mouse pad so that the mouse pointer moves in the direction you want, without touching the buttons. This action allows you to point to things on the screen.

2) **Click:** Clicking is used to select objects on the windows screen. To click, ensure that the mouse is pointing to want you want and press the left button of the mouse once and release the button immediately.

3) **Double-click:** Double-clic is most often used to start applications. To double-click, point to what you want and press the left button of the mouse twice in quick succession. You should get used with double-click; because new comers to the computer field find it difficult to cope with double-click in the beginning.

4) **Click and drag:** this mouse action is used to move an object from one place to another. When you click and drag and object from one place to another. When you click and drag an object, the object moves along with the mouse pointer. To click and drag, hold the left button of the mouse down and move the mouse to the place wherever you want.

Mouse after right click

The right click: Right Mouse button gains a lot of significance now-a-days. If you right click on an item, you will be provided with a context sensitive menu (context sensitive menu changes its contents depending on the situation) This also called shot-cut menu you can experiment with that menu. The context sensitive menu provides almost all the facilities offered by menu as well as toolbars. You can change left mouse button into right mouse button and vice versa. In this case the left click becomes the right click and vice versa. This action may be helpful; to the left handed people.

Moving the mouse pointer via the Keyboard.

Again you can create the effect of all the above operations by keyboard operations, In the beginning, people are very much attracted by the use of mouse, but when they have to write lengthy programs, changing mouse and keyboard frequently is irksome. Therefore those people who are experts in typewriting prefer to make use of keyboard to bring the effect of mouse click.

The following keys can duplicate the mouse operations. It you want to use your keyboard to do the work of the mouse, you have to follow these steps:

1) Click the **Start** button
2) select the **Control panel** in the menu and click it.
3) Choose the **Accessibility Options** in the menu and click it.
4) It opens a screen, click on **Accessibility option** under **pick a Control Panel icon.**
5) Open the **Mouse** tab
6) Activate use **Mouse Keys** check box if it is not already activated.

Windows XP allows you to move the mouse pointer by using the arrow keys on numeric keypad of the keyboard.

Note 1 : Make sure that you have **Num Lock** turned on.

Note 2 : Mouse keys do not work with the separate arrow-key keypads found on most modern keyboards.

Besides the basic arrow movements, you can also use the numeric keypad keys outlined here. The following table gives you the equivalent keys for mouse operations.

Key	Equivalent Mouse Action
5	Click
+	Double - Click
/	Select the left mouse button
*	Select both mouse buttons
-	Select the right mouse button

These key can be used as follows:

To double-click an object, use the arrow keys to move the pointer over the object, press the slash key (/) to select the left mouse button, and press the plus sign (+) to double-click

To right-click an object, use the arrow keys to move the pointer over the object, press the minus sign (-) to select the right mouse button, and press 5.

To drag-and-drop an object, use the arrow keys to move the pointer over the object, press the slash key (/) to select the left mouse button, press Insert to lock the button, use the arrow keys to move the object to its desired destination, and press delete to release the button and drop the object.

To click an object, use the arrow keys to move the pointer over the object, press the slash key (/) to select the left mouse button (if it isn`t selected already), and press 5 to click.

To right-drag-and-drop an object, use the arrow keys to move the pointer over the object; press the minus sign(-) to select the right mouse button; press Insert to lock button; use the arrow keys to move the object to its destination; and then press Delete to release the button to drop the object, and display the context menu.

Use Mouse Keys when Num Lock is on. These options determine the relationship between Mouse Keys and the Num Lock key. When On is activated (this is the default), for example, Windows XP will use Mouse Keys whenever you have Num Lock is on. If you then turn off Num Lock, you can use the regular arrow keys.

Show Mouse Key status on screen : When this check box is activated, windows XP displays the Mouse Keys icon in the system tray. Double-clicking this icon opens the accessibility Properties dialog box.

CHAPTER: II

WINDOWS EXPLORER:

What is new in windows XP?

1) Easier Installation and Updating

Roughly speaking, installation means the addition of program files and folder to your hard disk. Windows XP includes several features designed to make it easier to install and to keep up-to-date, the program files and folders.

2) Effective Multi-user capabilities

Windows XP keeps each user`s files separate so that no user can see another users files unless they have been shared deliberately. It lets multiple users Log on at the same time. End users run their applications.

3) Redesigned start menu

Windows XP provides a redesigned start menu that is easier and quicker to use. The start menu appears as a panel containing two columns. The lower part of the left column automatically reconfigures itself to show your most used applications. The start Menu can also be customized to the show classic start Menu (Similar to the start menu of Window 98).

4) Taskbar changes and enhancements

These improvements are designed to help beginners. Experienced user may switch back to how it was in the earlier versions of windows, if they like.

Taskbar locking: By default, windows XP Professional locks the Taskbar. This prevents taking the taskbar to an inaccessible area.

Taskbar scrolling : Taskbar locking prevents flexibility. It the taskbar is of a fixed size, buttons for the running applications must become very small and useless when 10 or more applications run, To tackle the situation windows XP provides a scroll bar on the taskbar when required.

Taskbar Button grouping : Windows XP provides only one button per application when there is not enough space to accommodate buttons on the taskbar. This too prevents minimizing the size of buttons displayed on the taskbar. It shows the name of the current active window along with the number of windows and a drop-down arrow. If you click the button, it will show you the list of windows by title, you can select any one of them

5) Notification area

The status area (system tray) is known as notification area. Notification area shows a few icons of the programs which are automatically executed at start up.

6) better Audio and Video Features

Windows XP includes a set of new features and improvements for audio and video.

7) CD Burning

Windows XP provides built-in CD burning capabilities, which reduce the effort taken by the user while writing something into the CD.

8) Search companion

Windows XP includes Search Companion, an enhanced search feature to search for finding information both on your PC and in the world Wide Web

9) Enhanced Autoplay Feature

If you insert a CD and if it starts playing the music from it or installing any software it contains, immediately, this facility is called autoplay. This feature is enhanced considerably in Windows XP

10) More Games

Windows XP includes more games than the previous versions of Windows. This may be a welcome move for young people.

11) Remote desktop Connection

This improved feature lets you use your computer to access a remote computer with less effort.

12) A more Useful Winkey

One or two winkeys may be provided in modern keyboards. Normally the key is situated between ctrl and Alt keys. This key possesses the windows logo. Windows XP includes more functionality for the Winkey. You are provided table with the uses of Winkey.

WINKEY COMBINATIONS

Winkey Combination	What it does
Winkey	Toggles the display of the start menu
Winkey+b	Moves the focus to the notification area
Winkey+Break box	Displays the System Properties dialog
Winkey+D	Displays the Desktop
Winkey+E	Opens an Explorer window showing My computer
Winkey+F	Opens a search results window and activates search Companion.
Winkey+Ctrl+F	Opens a Search results window, activates search companion, and starts a Search for Computer.
Winkey+F1	Opens a Help and support center window
Winkey+L	Locks the computer
Winkey+M	Issues a Minimize All Windows command
Winkey+Shift+M	Issues a Minimize All Windows command
Winkey+R	Displays the Run dialog box
Winkey+Tab	Moves the focus to the next button in the Taskbar.
Winkey+Shift+Tab	Moves the focus to the previous button in the Taskbar
Winkwy+U	Displays Utility Manager.

13) Improvement for portable computers

Windows XP includes several improvements for portable computers (such as Note book computers).

14) More Help

Windows XP delivers more Help-and more different types of Help-than and other version of windows. You have already seen some help topics of interest.

15) Network Connectivity

Windows XP provides various improvements in network connectivity.

16) Multiple Monitor Support-For Both Desktop and Laptop.

Windows XP Professional also introduces a new technology called Dual View, which offers excellent opportunities to multiple monitor support especially to laptops. The above characteristics can apply to both windows XP Professional and windows XP Home.

The following characteristics strictly belong to Windows XP Professional.

17) Backup and automated system Recovery (ASR)

Windows XP Professional includes a Backup utility and an ASR feature that can be activated from boot up to restore a damaged system.

18) Offline Files

Offline files allows you to store copies of files located on network drives on your local drive so that you can work with them when your computer is no longer connected to the network.

19) Remote Desktop

Remote Desktop allows you to access the Desktop of the computer connected remotely as if you are accessing the Desktop of y9our own computer. If you need to connect to your computer remotely via Remote Desktop connection, you need Windows XP Professional rather than windows Home. So far, you have seen features that caught your eyes. Now, you are going to see the facilities hidden in Windows XP Professional.

20) Protected Memory Management

Windows XP offers fully protected memory management. With this facility, Windows XP can handle memory errors effortlessly.

21) System File Protection

Windows XP offers a feature called system file Protection that protects your system files from inadvertent mistakes on your part.

22) System Restore

Windows XP provides a system Restore feature. This is more effective than System Restore feature found in windows Me.

You can use System restore to rollback the changes to an earlier point at which the system was working properly.

23) Device driver Rollback

Windows XP tracks the drivers you install and lets you roll back the installation of the driver. In other words, you can revert to the driver you were using before.

24) Compatibility with Windows 9x applications

Windows XP runs all applications that would run on windows 9X, Windows NT and windows 2000.

Guarding Against Viruses

The literal meaning of virus is poison. Virus enters into the living things and passes its code t the cells of the host. The host cell forgets to undertake its own work, it becomes the industry for producing viruses, Computer virus is a mischievous program designed to damage the Software, Hardware and / or data.

The technique of the biological virus is employed by the computer virus also. It enters your computers as innocuous software and multiplies many time,. In that process, it takes the lion`s share of the memory normally, erasing your own useful programs.

Though virus started from the Bell Laboratory in the name of core wars, it showed its ugly head to the world by the handiwork of a self taught Software engineer. But still the method of creating viruses was kept as a secret. One of the eminent computer professionals, while receiving a prestigious award, revealed the secret of creating viruses to the audience. The entire computer world was shell-shocked. This opened the Pandora box. From then on, the computer world is coursed with many viruses. Most of them are created by the students to just show their intelligence to the world, thus causing a loss of millions of dollars. The virus designers mainly attack windows OS.

Viruses come in three basic flavours. They are file infectors, Boot sector viruses and Trojan horse viruses

File infectors attach themselves to executable files and spread among other files when you run the program

Boot sector viruses replace the hard disk`s master boot record (or the boot sector on a floppy disk) with their own twisted version of the bootstrap code. This lets them load themselves into memory whenever you boot your system (the famous “Michelangelo” virus is one of these boot sector beasts).

Trojan horse viruses, which appear to be legitimate programs at first glance but when loaded, proceed to viciously damage your data:

Viruses are, by now, an unpleasant fact of computing life, and you just have to learn to live with the threat. But somehow in the beginning, the Microsoft chose to ignore this ugly threat, but now Microsoft deals with this crime more seriously in Windows XP. There are vendors who provide antiviral vaccines that will protect you from the hazards of this threat. Anti virus is a program to safeguard your system from the virus programs.

There are many such anti viruses, which make the life of the programers some what easy.

Here are two tips to keep your system virus-free:

1. The main source of the viruses is the floppy disk. So, one should be very careful about the floppies.

2. Now-a-days, the internet is the major source of producing viruses. One should be very careful while downloading files from the Internet. Keep your virus utility`s virus library up-to-date. By some accounts, more than 100 new virus strains are released each month, and they just get nastier and nastier. Regular updates will help you keep up-to-date

The Economical explorer Keyboard

If you want to have alternative methods for the mouse click, here is the table.

Alt+Enter	Display the properties sheep for the selected objects.
Alt+F4	Closes explorer (actually closes the active window).
Alt+left arrow	Takes you back to a previously displayed folder.
Alt+right arrow	Takes you forward to a previously displayed folder
Backspace	Takes you to the parent folder fo the current
Ctrl+A	Selects all the objects in the current folder.
Ctrl+C	Copies the selected objects to the Clipboard
Ctrl+V	Pastes the most recently cut or copied objects
Ctrl+X	Cuts the selected objects to the clipboard
Ctrl+Z	Reverses the most recent action.
Delete	Sends the currently selected objects to the recycle Bin

F2	It helps to rename the selected object.
F3	Displays the find dialog box with the current folder
F4	Opens the Address toolbar`s drop-down list.
F5	Refresh the Explorer window. This is handy if you have made changes to a folder via the command line or a DOS program and you want to update the Explorer window to display the changes
F6	Cycles the highlight among the all Folders list, the Contents list, and the address toolbar.
Shift+Delete	Delete the currently selected objects without sending them to the Recycle Bin
Shift+10	Displays the context menu for the selected objects
Tab	Cycles the highlight among the All Folders list, the contents list and the address toolbar. F6 does the same thing.

Keys for Moving the Cursor through Text

Key	**Where it Moves the Cursor**
→	One character to the right
←	One character to the left
↑	Up one line
↓	Down one line
Home	Beginning of the line
End	End of line
Ctrl+Home	Top of document
Ctrl+End	End of document
Page Up (Page Up)	Up a page (or screen)

Page Down (Page Dn)	Down a page (or screen)
Ctrl+ ←	One word to the left
Ctrl+ →	One word to the right
Ctrl+ ↑	Up one paragraph
Ctrl+ ↓	Down one paragraph
Ctrl+Page Up (PgUp)	To top of previous page
Ctrl+Page down (PgDn)	To top of next page

Summary

The opening screen is called the Desktop. It contains icons and taskbar. Icons are small pictures representing applications. The taskbar has the start button, the quick launch toolbar and the System Tray.

The Start menu acts as a launch pad for most of the applications in the computer.

You can start application using the icons on the desktop or the start menu.

The rectangular area on the desktop that is used by an application is called a window.

Every window has a title bar with sizing buttons, menu bar, tool bar and borders.

A window can be moved, resized or closed.

Windows XP allows you to customize the desktop and taskbar.

The Control Panel allows you to install and manage different hardware and software components in your computer.

It is always a good practice to shut down the computer properly before switching the power off.

Files can be of two types - Application and document files. Applications are used to create data files

Command Prompt option on the start menu allows you to use DOS commands and run DOS- based programs

The Clock on the taskbar is used to change the date and time

The Calculator is like an ordinary calculator. WordPad is a simple word processor that is used to enter and store text. Paint is used to draw and colour pictures.

Windows allows you to use multiple applications at the same time.

You can switch between applications using the buttons on the taskbar.

You can also transfer data between two applications.

The Clipboard is a temporary storage for data being copied or moved.

All information on disks are stored as files. Every file has an unique file name. A collection of files is called a folder

Windows explorer is an application that allows you to manage your files and folders.

Windows Explorer provides two Bars. They are Explorer Bar, folders Bar. Explorer Bar provides easy way to move, copy or delete.

Using windows explorer, you can, view the files and folders on your disk.

Create new folders, Copy and move files and folders. Rename files and folders

Delete files and folders

Create shortcuts for frequently used files and applications.

CD-RW can be used as a floppy.

The Search feature allows you to search for files or folders.

The Run command provides an alternate way to start applications and open data files.

Viruses are ugly programs that spoil work. One has to be careful about them.

IMPORTANT POINTS TO BE REMEMBERED FOR THE

Ist CHAPTER AN INTRODUCTION TO WINDOWS XP

1. Windows XP is an Operating System.

2. The opening screen is called the Desktop. It contains icons and Taskbar, Icons are small pictures representing applications. The Taskbar has the Start button. The Quick Launch toolbar and the Systems Tray.

3. The Start menu acts as launch pad for most of the applications in the computer.

4. We can start applications using the icons on the desktop or the Start menu.

5. The rectangular area on the desktop that is used by an application is called a Window.

6. Every window has title bar with sizing buttons, menu ,bar, tool bar and boarders.

7. A Window can be moved, resized or closed.

8. The Control Panel allows you to install and manage different hardware and software components in your computer.

9. It is always a good practice to shut down the Computer properly before switching the power off.

10. When we move the mouse, a pointer move on the screen. This pointer, called the Mouse Pointer.

11. Turn off the computer by the key combinations of Alt=F4 and the click turn off button.

12. Resource Button: This button is used to restore the window to its original size (i.e. to the size before you maximized it.)

13. Maximize Button: Click on this button enlarges the window to fill the entire desktop.

14. Close Button: This button is used to close a window.

15. List Box: These boxes display a list of choices. we can select the one we want by simply clicking on it.

16. OK button in a dialog box, Window will accept our choices

17. Cancel button will make windows ignore the changes and close the dialog box.

18. Blue Underlined Text: Click the blue underline text, it will open the item associated with the text.

19. Green Underlined Text: Click on this term it will provide the definition of the term.

20. Changed View: In order to reclaim more space, we can hide the left pane by clicking the Change View button. If we again click Change View button, the left pane will appear once again. We can also perform the above action manually. We can drag the right pan to the left, so that a right pan may occupy the entire screen.

21. Home: This is the background display that appears on the desk top.

22. Click on screen saver tap in the display prosperities dialog box

23. Control panel provides two views to control panel. Namely (i) Category view, (ii) Classic view.

24. The opening screen of Windows XP is called the Desktop.

25. The two different start menus are usual start menu, and classic start menu.

26. Control Panel allows you to install and manage different hardware and software components in your computers.

27. When we in are in Welcome Screen Ctrl+Alt+Del Key combinations entering in the user name and password dialog box.

28. Closed button is used to close a Window.

2ND CHAPTER: WINDOWS EXPLORER:

1. All information on disks are stored as Files.
   Each file has an unique file name.

2. It is a collection of files is known as Folder
   To start Windows explorer click

3. Start ? All programs ? Accessories ? Window Explores

1. Windows Explorer is an application that allows us to manage our files and folder.

2. Explorer is divided into three categories, namely
   (I)File and Folder Task (ii) Other places (iii) Details

3. A small yellow icon represents each folders

4. Create new folders, copy and move files and folders. Rename files and folders.

5. Create shortcuts for frequently used files and applications.

6. To Open a new folder:
   Click File ? New ? Folder (A new folder is created temporary)

7. A plus sign to the left of the folder icon in Folder Bar indicates the presence of Subfolders within this folder

8. + sign to display a list of the subfolder. Sign will hide the details.

9. If there is no +sign to the left of a folder icon, it means that the folder does not have any subfolder.

10 Views will help us in finding a forgotten file

11. Windows Explorer provides two Bars. They are explorer Bar, Folders Bar, Explorer Bar provides easy way to move, copy or delete.

12. Using Windows, Explorer, we can, View the files and folders on our Disk.

13. Moving and Copying Files and Folders:
    Once the files are selected, we can move or copy them using Cut, Copy and Paste in three different ways.

(i) Click on the Ed

(ii) Right click on
short cut menu

(iii) We can use th
(Ctrl+c) to copy

14. Difference between
folders untouched
removes the files or
destination location

15. CD-RW can be used

16. CD-R disk cannot be

17. Click File ? Rename

18. Recycle Bin is like th

19. The Search feature

20. The Run command p
applications and ope

21. To use the Run com
Run. Type the file n

22. File name is made u
(i) main component

23. The dot (or full stop)
Extension

24. Start Paint: Click on

25. Windows XP allows
(i) Keyboard shortcu

26. Shortcut Method to K
Paint. To do it, first c
Accessories / Paint

27. What is new in Wind
(a) Effective mu
(b) Easier Instal

(c) Redesigned Start Menu.
(d) Taskbar changes and Enhancements.
(e) Notification area.
(f) Better Audio and Video features
(g) CD Burning
(h) Search Companion
(i) Enhanced Auto play Feature
(j) More games.
(k) Remote Desktop connection
(l) A more useful win key.
(m) Improvement for portable Computer.
(n) More Help and Network Connectivity.
(o) Multiple monitor support for both desktop and laptop
(p) Backup and Automated system recovery.
(q) Offline files.
(r) Remote Desktop
(s) Protected Memory Management
(t) System file protection and system Restore.
(u) Device Driver Rollback.
(v) Compatibility with windows 9x Applications.

28. Viruses come in three basic flavours. There are
(i) File Infectors
(ii) Boot sector viruses.
(iii) Trojan horse viruses

Viruses are very dangerous programs which spoil work. Every one should be careful when Operating the System.

Abbreviations

ALU	Arithmetic Logic Unit
ASCII	American Standard code for Information Interchange
ATM	Automatic Teller Machine
BIT	Binary Digit
CAD	Computer Aided Design
CPU	Central Processing Unit
CD	Compact Disk
Dbase	Data Base
DOS	Disk Operating System
Dpi	Dots per Inch
EEProm	Electrically Erasable Programmable Read Only Memory
FDDI	Fiber Distributed Data Interface
FTP	File Transfer Protocol
FIFO	First in First Out
GR	Giga Bytes
GUI	Graphical User Interface
HTTP	Hypertext Transfer Protocol
IC Chip	Integrated Circuits Chip
IC ANN	International Corporation for Assigned Names and Numbers
IC ANN	International Corporation; for Assigned Names and Numbers
IP	internet Protocol
ISP	Internet Service Provider
LAN	Local Area Network
LSB	Least Significant Bit
TCP	Transmission Control Protocol
MAN	Metropolitan Area Network
MODEM	Modulator Demodulator
MSB	Most Significant Bit
MB	Mega Bytes

MICR	Magnetic Ink Character Recognition
MSDOS	Microsoft Disk Operating System
NIS	Network Interface Card
OSI	Open System Interconnection
OS	Operating System
OCR	Optical Character Recognition Software
OMR	Optical Mark Recongnition
Pixel	Picture Element
PC	Personal Computer
PDA	Personal Digital Assistant
PROM	Programmable Read Only Memory
SJF	Shortest Job First
RAM	Random Access Memory
ROM	Read Only Memory
UTP	Unshielded Twisted Pair
WWW	World Wide Web
WAN	Wide Area Network

III. INTERNAL EXAMINATION

MARKS : 50

<u>PRACTICAL I</u> (TYPEWRITING)

INTERNAL ASSESSMENT - 25 MARKS

i) Record work : Preparation of Albums, Names of parts Cleaning & Oiling, Envelope addressing, etc., ….5 marks

ii) Maintenance of files and Note Book & etc., ….5 marks

iii) Performance in monthly tests & terminal exams ….5 marks

iv) Attendance & Attitude ….5 marks

v) Typewriter maintenance in the class room …..5 marks

<u>PRACTICAL II</u> (COMPUTER OPERATION)

INTERNAL ASSESSMENT - 25 MARKS

i) Record work : Chapter I (Introduction to Windows XP) and Chapter II (Windows Explorer) ….5 marks

ii) Maintenance of files and work Book & etc., ….5 marks

iii) Performance in monthly tests & terminal exams ….5 marks

iv) Attendance & Attitude ….5 marks

v) Computer system maintenance in the class room …..5 marks

IV. Model Question Paper

TYPEWRITING - (PRACTICAL)

XI. Standard | **English** | **Time : 15Mts.**

PART - A | **Marks : 50**

(Maximum Marks:150)

Land and Labour in modern economic parlance are the basic factors of creation on this planet. Between the two, labour is supreme, for it is he who makes conscious and deliberate efforts to unravel the laws and mysteries of land and makes use of them for his own development. Indeed, his own development is the be-all and end-all of his entire conscious effort. Looked at in this light, human development has been the objective of human Endeavour ever since Adam and Eve first appeared on this earth. Yes in the beginning, the thrust of human Endeavour was in the direction of spiritual development, but now it is in the direction of material development.

In the earlier years, it was primarily the responsibility of an individual to develop himself, but now it has become the responsibility of the State to arrange for all round development of human beings. This has put human beings in new light. The shift in emphasis from individual effort and spiritual development to State planning and material development has turned human into a factor of production an economic. Resource to be brought up developed and used for material development of the country as a whole. Population growth at an alarming rate comes in the way of these social objectives in a big way. Rapid growth of population, therefore, has rightly been cause of concern in jour country since the early fifty's. However, popular perception in this regard has undergone a sea change over the last couple of years.

In early fiftys, socio-economic implications of population growth were a matter of concern largely in the context of the argument that rapid population growth is an obstacle to development. But now it is increasingly recognized that the relationship between population growth and development is not that simple it is rather much more complex. In 1994, it has been forcefully argued and accepted that rapid population growth itself is in many ways the result of a lack of development. In course of time many other dimensions have been added to this relationship which was once viewed to be unidirectional. After the ICPD Conference population issue is placed in a much large context of sustainable development. Over the years, the concept of development little has undergone a change.

In the context of people-centered development, many dimensions like gender equity, women's empowerment, environmental degradation, uplift of the weaker sections and human resource development have assumed considerable significance. From this point of view, it is essential to look in to the implications of population.

PART : B Question No. 1

Type the following Statement and rule up:-

STATEMENT SHOWING PARTICULARS OF DOCUMENTS REGISTERED:

Places	1990-91			
	No. of Documents registered	Value of Property	Expenditure	Receipts
		Rs.	Rs.	Rs.
Thanjavore	31,780	49,20,154	7,65,103	29,297
Erode	19,450	48,35,270	92,27,940	4,21,415
Cuddalore	51,279	60,30,210	92,27,410	4,90,320
Kanya-Kumari	58,261	70,30,495	9,96,317	4,21,415
Tambaram	38,410	69,76,600	8,22,413	3,71,410

Question No. 2

Type the following CREDIT NOTE and rule up:-

CREDIT NOTE

Telephone: 2566842
Telegrams: "Ramu"

Post Box No. 187
80 Kamarajapuram,
Chennai - 600 035

No. 360/2002

2nd June 2002.

M/s. Rajendran & Co.,
15, Church Gate,
Bombay - 400 058.

Cr. by THE FASHION HOUSE

Details of Invoice	Particulars	Amount Rs. P.
21st May 2002 Inv. No. 84	By 100 Nos. two yards Dhoties (handloom) at Rs. 15/- not having bn. ordered	1,500 00
—do—	By. 50 Nos. Napkins at Rs. 2/- not having bn. ordered.	100 00
	Total	1,600 00
	(Rupees one thousand and six hundred only)	

for THE FASHION HOUSE,

Head clerk.

Question No. 3

JAGADEESAN, A.C.A
Chartered Accountant.

Telephone: 353(38)
45 (St.) Kalinga -nayar
Ram Nagar
Coimbatore 641009.

18th August 2002.

Messrs. Rathi Finance Ltd.,
1025 (Gandhipuram) V cross,
~~x x x x x x x x~~
Coimbatore 641012.

Dl Sirs,

Sub: audit of accounts - Certain Clarification required to finalise the ~~accounts~~ statements.

— — —

We have audit taken up the of your Company and on Scrutiny we find that the (furnished) (particulars) by you are not sufficient to finalise the Statements. We request you to depute your Chief accountant W. instructions to meet our Manager before the end of this month.

Our Managers Wd. give necessary instruction. // We do hope th. you would give your fullest Co-operation to enable us to complete the finalisation of the accounts of your Company.

Thanking you,

Yours ftly
(JAGADEESAN)
C.A.

Question No. 4

Government of Tamil Nadu

Abstracts

(1990) Pongal Festival - Grant of pongal prize amounts - Ordered.

Finance Department

G.O. Ms. No. 1(10) Dt. the 10th Jan. 1990.

Read / following:

From the union Madras, (Non-gazetted Officers)

Letter L. No. 100/T.N./89, dated 25th Dec. 1989.

Order:

The Govt. sanction a lumpsum pongal prize amount of Rs. 400 (Rupees four hundred only) to all regular employees of Govt. employees of Local Bodies and Aided educational institutions including teachers.

2. Additional funds, if any will be provided in the final modified Appropriation for 1989-90. The heads of Depts. are requested to take this expenditure into a/c. while sending proposals for final modified Appropriation 1989-90.

(By order of the Governor)

N. NARAYANAN,

Secretary to Govt.

To

All Heads of Department

Forwarded/By Order

S. G.

PART : C

Qn.No: 5 Mechanism **10 x 2 = 20**

Answer any ten of the following questions. Each question carries equal marks.

01. Who invented the first Typewriter ? When?

02. How many kinds of Typewriter there? And what are they?

03. How will you Identify your Typewriter?

04. How many thumb wheels are there ? Mention its uses?

05. How many kinds of Cylinders? And What are they?

06. Mention any 2 sizes of the Cylinder?

07. What are the guide fingers? And Which is the guide row?

08. What will happen when the draw card is cut off?

09. Mention any 2 Non-Character keys?

10. How many Character keys are there in the key board?

11. When cleaning and oiling has to be done?

12. What are the accessories required for cleaning the typewriter?

13. What is the use of a wire brush?

14. Mention the two types of envelope?

15. How will you clean the nickel parts?